#### DOCUMENT RESUME

ED 316 738 CE 054 419

AUTHOR

Stavrou, Stavros

TITLE

Vocational Training in Greece.

INSTITUTION

European Centre for the Development of Vocational

Training, Berlin (West Germany).

REPORT NO

ISBN-92-825-6585-8

PUB DATE

NOTE

184p.; Colored map and chart will not reproduce

well.

AVAILABLE FROM UNIPUB, 4651-F Assembly Drive, Lanham, MD 20705-4391

(Catalogue No. HX-45-86-846-EN-C, \$4.00).

PUB TYPE

Reports - Research/Technical (143)

EDRS PRICE

MF01/PC08 Plus Postage.

DESCRIPTORS

Apprenticeships; Career Planning; \*Educational Administration; \*Educational Finance; \*Educational History; Educational Philosophy; Educational Policy; \*Educational Practices; Employment; Higher Education; \*Job Training; Labor Market; Postsecondary Education; Secondary Education; Technical Education; \*Vocational

Education

IDENTIFIERS

\*Greece

#### ABSTRACT

This document presents an overview of the educational system in Greece, with particular emphasis or vocational training. The monograph is organized in eight chapters. The first two chapters contain general information and statistics on the population and employment in Greece and the economy and labor force. Chapter 3 is an overview of scholastic education and vocational training, including information on the various types of postcompulscry education, such as the general lykeion, technical and vocational schools, technical and vocational lykeions, integrated comprehensive lykeions, the Greek Naval Lykeions for Officer Cadets, middle technical and vocational nursing schools, and apprenticeships; career planning; and nonuniversity higher technical and vocational education. Chapter 4 reports on further education, especially that oriented toward the job market. Chapters 5, 6, and 7 discuss the historical development of the educational system, the authority structure of the system, and the financial structure of the educational system. The final chapter suggests future trends in vocational education in Greece. Statistical data are reported in the appendix, and a list of abbreviations, notes, and a 39-item bibliography are included. (KC)

Reproductions supplied by EDRS are the best that can be made

\*\*\*\*\*\*\*\*\*

from the original document.

on behalf of CEDEFOP — European Centre for the Development of Vocational Training, Berlin 1985

Published by:

European Centre for the Development of Vocational Training, Bundesallee 22, D-1000 Berlin 15,

Tel. (030) 88 41 20; Telefax: (030) 88 41 22 22; Telex: 184 163 eucen d

The Centre was established by Regulation (EEC) No 337/75 of the Council of the European Communities

# Vocational training Greece

J.S. DEPARTMENT OF EDUCATION Office of Educational Research and Improvement EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

I' This document has been reproduced as received from the person or organization originating it

Minor changes have been made to improve reproduction quality

Points of view or opinions stated in this document do not necessarily represent official OERI position or policy

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY





This publication is also available in the following languages:

DE ISBN 92-825-6512-2 GR ISBN 92-825-6513-0 FR ISBN 92-825-6529-7

Cataloguing data can be found at the end of this publication

Luxembourg: Office for Official Publications of the European Communities, 1987

ISBN 92-825-6585-8

Catalogue number: HX-45-86-846-EN-C

Reproduction is authorized, except for commercial purposes provided the source is acknowledged



## Dear Readers,

The best way of promoting cooperation among the Member States of the Community in the field of vocational training is by promoting understanding of the various training systems. CEDEFOP has deployed a large portion of its resources with a view to improving an exchange of such information, not only by publishing monographs such as this but also by organizing conferences and seminars, producing audiovisual material and publishing a series of studies and documentary dossiers.

This monograph is intended to serve as a frame of reference providing the reader with a maximum of information on many aspects of vocational training — the legislative framework, funding, historical development, etc. Our objective here is to present a "dynamic" description placing the questions encountered in the field of vocational training in their proper economic, social and cultural context within the Member State under review.

This monograph serves as a basic document for a wide range of activities at the Centre, for example the establishment of comparability between vocational qualifications or in-depth studies of certain important aspects in the development of initial and continuing vocational training.

The text of this description was prepared in consultation with the social partners, and we hope that we have thereby maintained a position of objectivity which respects the opinions expressed by all the parties involves, i.e. the representatives of the governments of the Member States and of the two sides of industry.

Our publications describing the vocational training systems in the various Member States are based on a single structure, an approach which facilitates the work of comparing and contrasting respective system elements wherever comparison is possible.

All the monographs are available in the original language and at least two other Community languages.

During the course of 1987 the Directorate of the Centre will develop proposals for a new version of the CEDEFOP Guide to take account of the fact, firstly, that training systems undergo a process of change and, secondly, that from 1 January 1986 the Community has two new Member States.

The Centre extends its thanks to the authors for their collaboration.

Ernst Piehl

(Director)

C. Politi

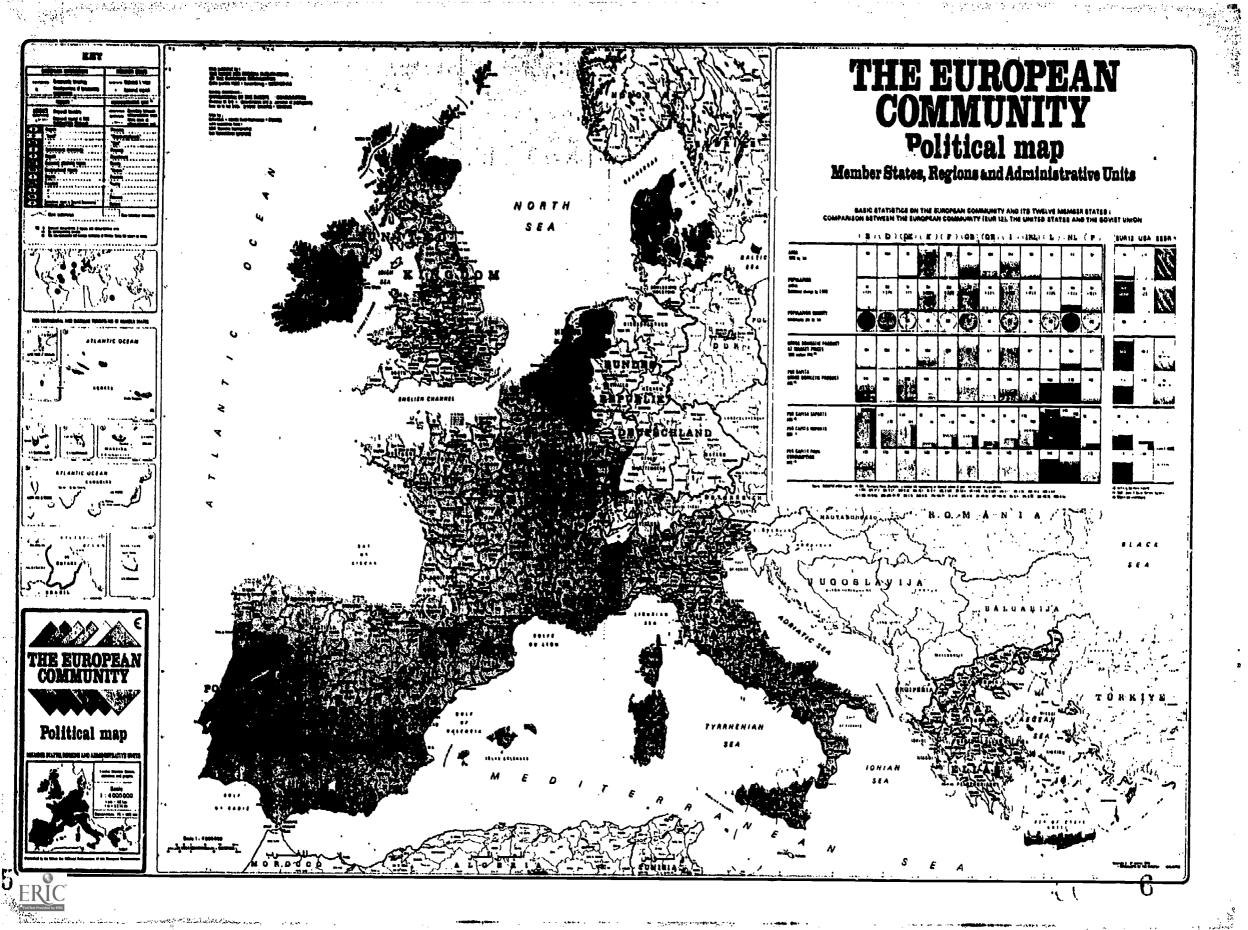
(Deputy Director)

Michael J. Adams

(Expert responsible for the project)

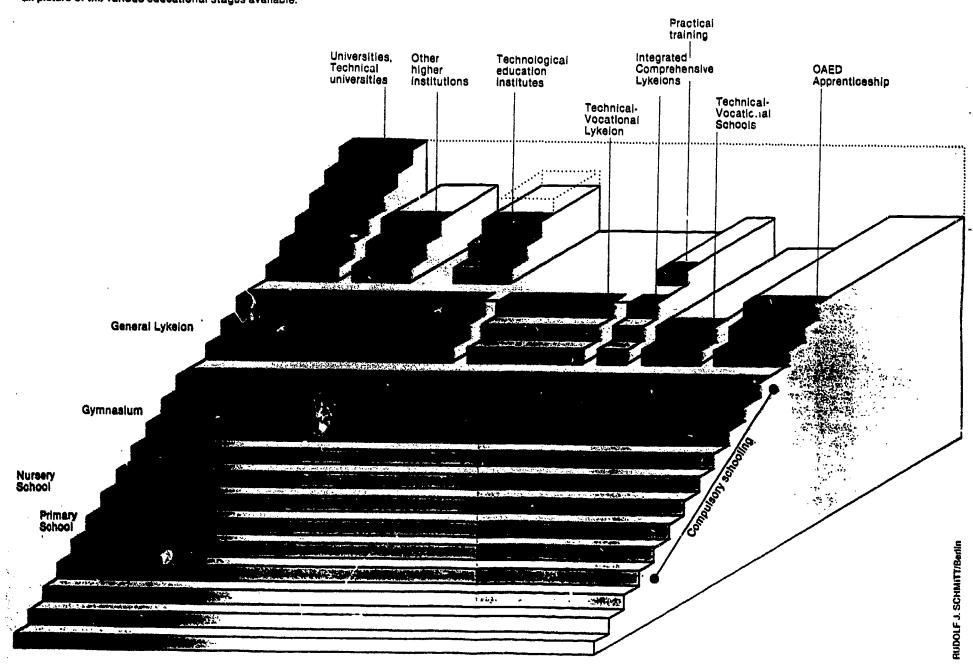
Georges Dupont

dispert responsible for the projecti

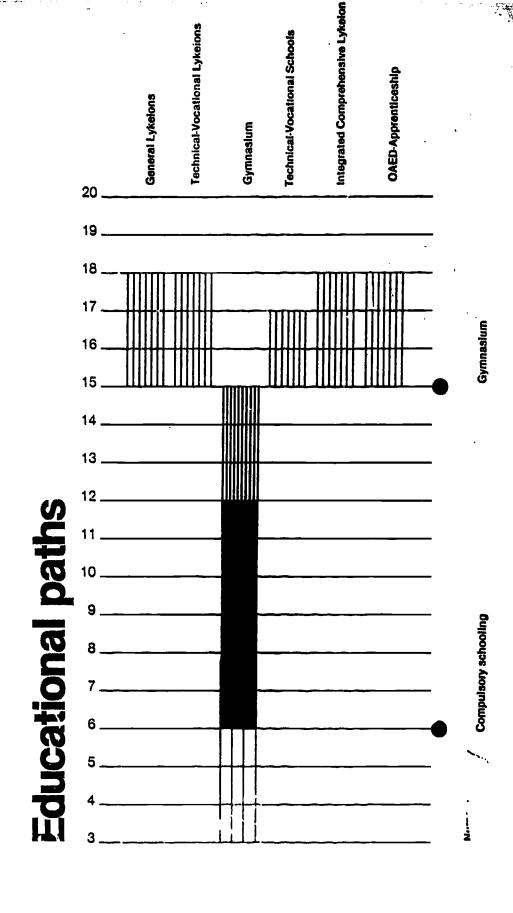


### Educational age pyramids

This diagram of the educational system gives an overall picture of the various educational scages available.







## Age structure

Age profile for the year 1970 and 1981 and a projection to the year 2000 (All over 75 are brought together into one group)

1971 Men Wome	m	1981 Men Women	20	00 Men   Women	
				~ , · · · ·	h
					<u> </u>
				,	
		~			
•					
~					
					A
					·
				•	
4 4 4 5 5 5 5 5 A 52 A 52		3 2 1 0 1 2			
		1971 Men   Women			

### CONTENTS

DI		page
-	ROLOGUE	1
1.	POPULATION AND EMPLOYMENT	5
	. Population 2. Employment	5 11
2.	THEECONOMY	21
Z.K.	. Basic measurements of aconomic development . Vocational training and economic requirements . Labour force and economic requirements	21 26 36
3.	SCHOLASTIC EDUCATION AND VOCATIONAL TRAINING	38
3.2. 3.4.	General Opportunities for post-Gymnasium (lower cycle secondary) education 3.2.1. The General Lykeion (higher cycle secondary) education 3.2.2. Technical and Vocational Schools 3.2.3. Technical and Vocational Lykeions 3.2.4. The Integrated Comprehensive Lykeions 3.2.5. The Greek Naval Lykeions for Officer Cadets 3.2.6. Middle Technical and Vocational Nursing Schools 3.2.7. Basic training for the tourist industry 3.2.8. Other 3.2.9. Apprenticeship through the OAED (Organization for Manpower Employment) Careerplanning 3.3.1. The Ministry of Education 3.3.2. The Organization for Manpower Employment — OAED Post-Lykeion (non-university higher technical and vocational) education 3.4.1. General 3.4.2. The Ministry of Education 3.4.3. The Ministry of Mercantile Marine 3.4.4. The Ministry of Health and Welfare 3.4.5. The Ministry of State 3.4.6. Tile Ministry of Transport and Communication	38 42 42 43 46 51 53 57 58 60 61 67 68 69 71 71 72 81 82 83 83
4.	FURTHER EDUCATION	85
4.2.   4.3.	General Further education oriented towards the Job market Further education programmes of the General Secretariat for Adult Education	85 86 95
	HISTORICAL DEVELOPMENT	102
	THE AUTHORITIES	111
3.2. 1 6 6	General The decision-making mechanism 6.2.1. In the Ministry of Education 6.2.2. In the OAED The role of the social partners	111 114 114 115
7. F	FINANCING	116
.1. G	General	118
7	The overall structure of financing 7.2.1. Public funding 7.2.2. Private funding 7.2.3. Mixed source funding	118 118 124 128 128



 $\varsigma$ 

8. FUTURETRENDS	133
APPENDIX	137
ABBREVIATIONS	147
ANNOTATIONS	151
BIBLIOGRAPHY	16 <sup>-</sup>



#### PROLOGUE

The writing of a document on the subject of vocational training in Greece is part of an overall project of the "European Centre for the Development of Vocational Training" (CEDEFOP), whose objective is for each European Community member-state to be presented in this area. In the case of Greece, the compilation of such a document could be regarded as an attractive but at the same time difficult undertaking. Attractive as a project because, as there is no existing precedent in such a format, it has the motivating virtue of a prototype. Difficult because it is intended for both the Greek and the European reader, so that the information given should neither weary the reader with too much detail, nor omit potentially significant aspects of the subject.

The structure of the document is predetermined by CEDEFOP, and, as such, confining as for all documents, in order that a comparable portrayal of community territories - as far as this is possible - can be achieved. It is clear here that the coordinators' wish is that all the major aspects of vocational training are to be revealed, even if in outline only, and particularly those referring to demographics and economics, to matters of employment and further education, as well as to administrative and funding mechanisms. The historical perspective of the subject is also of interest plus a look at the relative future trends.

It is evident that the chapters referring to scholastic education and vocational training, as well as to the



11

further education affiliated to these, compose the nucleus of this work. Particular attention was also given to the chapter on financing which, although this area has remained uninvestigated up until recently, could, given suitable management, motivation and reallocation of funds constitute a very important lever for the swifter development of vocational training. On the other hand, facts and information relating to population. employment, economy and historical development have been limited to the strictly necessary, since going into further detail might fuel discussion on the equality of alternative sources and/or their combinative interpretation and importance, not relevant to our subject. Finally, on the subject of administration and authorities, the conventional, evident decision-making processes have a relatively clear and simple framework, while, in attempting to evaluate future prospects, legislative reform is so recent that for the present we can only theoretically approve, object to or draw up hypothetical scenarios for its future course.

The collection of statistical data and information was a painstaking task as a rule, in some cases resulting out of original research, with questionnaires and interviews, while often the transitory nature of some institutions has made their precision definition difficult, since the old one had essentially cased to exist without the new one yet being established.

It is obvious that in a first such attempt at a com-

plete record of vocational training activities in Greece, ommissions and/or weaknesses will occur. Thus, constructive criticism is not only acceptable but also desirable, in order that perhaps necessary improvements or alterations may come out of a constructive dialogue.

The form and procedure of this investigation made necessary my direct communication with a series of persons in authority in vocational training bodies, who contributed significantly to the completion of this work. Here I would like first of all to thank Mrs. Aik. Grakiotou, Director of the General Secretariat for Adult Education and representative of the Greek Government on the Administrative Council of the CEDEFOP, for her unstinting support from the very beginning in finding vital information, in arranging contacts with the authorities and in the final proof-reading of this document. I also owe thanks to Mr. 1g. Hadziefstratiou, Director of Vocational Training at the Ministry of National Education and Religion (YPEPF) and to his colleagues. Mrs. Asp. Patouha, Director of Apprenticeship at the organisation for Manpower Employment (OAED), to Mr. Vrongistinos, Principal of the KEGE (Agricultural Education Centres) Department of the Agricultural Training Management at the Ministry of Agriculture, to Mr. V. Mihos from the Operating Department of the School of Tourist Industry Professions, to the Officers of the Training Department at the Ministry of Mercantile Marine, as well as to the employee management at the Direction for the Development of Medical and Sanitary Provisions at the Ministry of Health and Welfare,



for the very useful and thorough information which they placed at my disposal. Finally, collaboration with Messrs. K. Karma, researcher at the KEPE (Centre of Planning and Economic Research), and Mr. S. Palaiokrassas, Consultant at the KEME (Centre for Learning Studies and Further Education) proved extremely fruitful; their support on matters of financing for vocational training was decisive.

To my appointed colleague from CEDEFOP, Mr. Georges Dupont, who was also the Supervisor of this study, I would like to express my particular thanks for our excellent working relationship, as well as for the understanding he displayed towards the obstacles which occurred in the course of this investigation.

S. Stavrou

Salonica, September 1985

#### 1. POPULATION AND EMPLOYMENT

#### 1.1 Population

Greece covers a surface area of 131,900 square kilometers, of which 25,078 square kilometers, i.e. approximately 19%, are islands. The total population, which in 1981 numbered 9,740,410 inhabitants, shows the following developments in the last twenty years: (1)

TABLE 1

Total population, density and population movements

in 1961, 1971, 1981

	<u> 1961</u>	<u> 1971</u>	<u> 1981</u>
Total Population	8,388,553	8,768,641	9,740,417
Population Density	63.6	66.5	73.8
Changes (%)	4.5	5 1	1.1

It is worth noting here that the major differences in the rate of change between the 1961-1971 and 1971-1981 decades are mainly due initially to the fast increase in the rate of emigration and in the subsequent repatriation of the labour force, mainly to and from Western European industrial countries. Thus in the 1971-1981 decade, the number of repatrianes alone came to 332,791, and the natural population increase to 638,985 people. In other words, the former contributed by 34.2% to the total population increase.

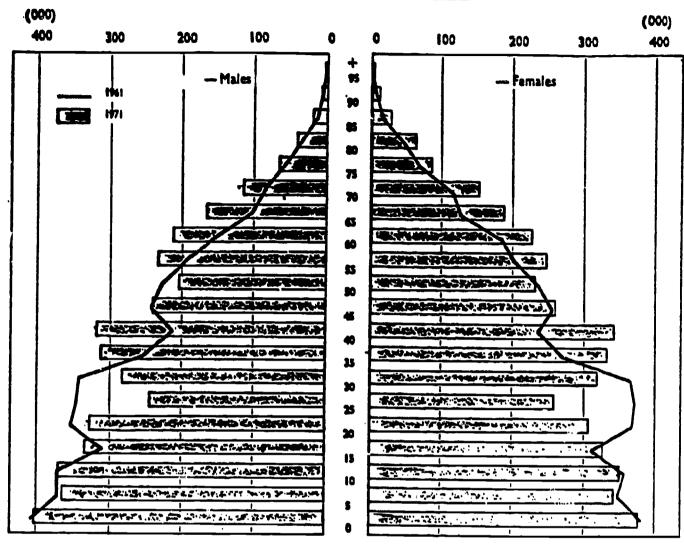
The age pyramids of the population, in a dual comparison in the years 1961-1971 and 1971-1981, give the following picture (2):



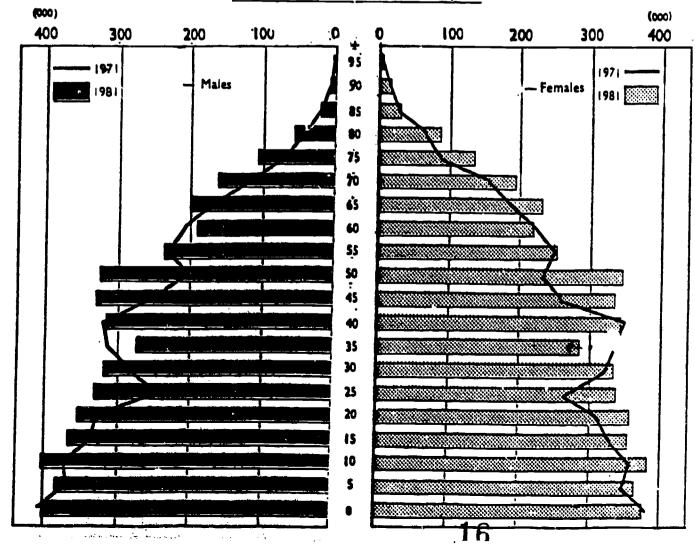
TABLE 2

Greek Population in 1961, 1971 and 1981

Census: 1961 - 1971



<u>Census' 1971 - 1981</u>





In the period 1961-1981 a shift in the age group structure can be observed which could be attributed to a trend towards ageing which can be seen in the following table: (3)

TABLE 3

Development of the population in basic age groups

from 1961 to 1981

AGE GROUPS	1961	1971	1981
0 - 14	26.7%	25.4%	22.0%
15 - 64	65.1%	63.7%	64.8%
65 and over	8.2%	10.9%	13.2%

According to these figures, the percentage of children up to 14 years old decreased by 4.7 percent while that of the elderly 65 years and over increased by 5 percent in this period.

At this point it is useful to recall - although with serious reservations as to their reliability - the projections for the future development of the population to the year 2000. Two significant factors concerning these reservations are:

- a) the large distance over time from the point at which the population projections begin, being the 1971 census (no such projection has yet been made based on the 1981 census) and
- b) the fact that the projection is based among other things on the hypotheses that there will be no migratory movements  $^{(4)}$ , something which is not realistic, as indicated by the relatively counter-



3

halancing movements in the 1961-1971 and 1971-1981 decades respectively.

Thus, the population projection up to the year 2000 shows, in five-year stages, the following dimensions:

TABLE 4

Greek popula	tion projecti	ion to the yea	r 2000
POPULATION		YEAR	
	<u> 1990</u>	1995	2000
Total	9,880,000	10,167,900	10,434,700
Of which females	4.986.900	5.115.100	5,232,900

Reservations as to the validity of the projection are also increased due to the variance between that for the year 1980 and the actual population for 1981. Thus, while the projection gave 9,308,200 people, the actual population - one year later - was 9,740,417 (variance 4.6%). Perhaps more significant were the differences relating to the proportion of each of the three basic age groups, where the projection of 23.2% for (0-14), 64.0% for (15-64) and 12.8% for (65 and over), gave a more "imprecise" picture for the trend towards ageing which constitutes a serious demographic danger (see also TABLE 3).

With regard to the degree of urbanisation of the population it is worth following the chronological development, based on the population structure "urban - semiurban - rural." Urban population is defined as people who live in cities of 10,000 plus inhabitants, semi-urban in towns of 2,000 to 9,999 inhabitants and as rural those

who live in settlements of under 2,000 inhabitants. The relative changes are shown in the following table (5):

TABLE 5

Development of the urban, semi-urban and rural population

from 1961 to 1981

YEAR	URBAN	SEMI-URBAN	RURAL
1961	3,628,105(43.3%)	1,085,856(12.9%)	3,674,592(43.8%)
1971	4,667,489(53.2%)	1,019,421(11.6%)	3,081,731(35.2%)
1981	5,659,528(58.1%)	1,125,547(11.6%)	2,955,342(30.3%)

A significant shift can be seen here, which could be unequivocally termed as a drift to the cities, since the ratio between urban:rural population, from 1:1 in 1961 approaches 2:1 in 1981, while the percentage of semiurban population shows only a marginal shift.

Examination of the population movements between the 10 regions of the country is similarly interesting, where, although these do not constitute strictly delineated governmental districts, they do however consist of fixed geographical areas, on behalf of whom the current regional policy is being designed, implemented and evaluated. The exact administrative division of the country is its separation into 51 Boroughs (prefectures). In the following table, the population shifts between the 10 regions from 1961 to 1981 are shown - in absolute numbers as well as in percentages - (6):



TABLE 6
Breakdown of the population between the 10 regions

		•		CHANGE %		CHANGE % PERCE		RCENT	NTAGE	
				+ 0	r -	0	F TOT	AL		
	•	YEAR		1961	1971	PO	PULAT	ION		
Region	1961	1971	1981	1971	1981	1961	1971	1981		
Capital City	1852709	2540241	30. 7331	37.1	19.2	22.0	29.0	31.1		
Evoia	969105	991004	1099841	3.2		11.6		_		
Peloponnese	1069390	986912	1012528	-10.0		13.2				
Ionian Isles	212573	184443	182651	-13.2	-1.0	2.5	2.1	1.9		
Epirus	352604	310334	324541	-12.0	4.6	4.2	3.5	3.3		
Thessaly	691771	660986	695654	- 4.5	5.2	8.3	7.5	7.1		
Macedonia	1895112	1890684	2121953	- 0.3	12.2	22.6	21.6	•		
Thrace	356555	329582	345220	- 7.6	4.7	4.3	3.8	3.4		
Aegean Isles	477476	417813	428533	-12.5	2.6	5.7	4.8	4.4		
Crete	483258	456642	502<65	- 5.5	10.0	5.6	5.2	5.2		



The exact and in-depth interpretations of probable inter-regional population movements are outside the objectives of this document. However, some general trends which come out of the preceding figures could - or should - have some influence on the decision-making policy for technical - vocational training. For example, something which is particularly striking is the marked increase - in absolute numbers as well as percentages of the total - in the population of the Athens area. Today, almost \( \frac{1}{3} \) of the total Greek population lives there.

This degree of concentration becomes even more distinct if one bears in mind that the population in this area is greater than the total rural population of the country (see TABLES 5 and 6).

#### 1.2 Employment

An exact illustration of the employment and unemployment situation in Greece is not easy, because the ESYE (Greek National Statistical Service) uses different definitions for these two terms, resulting in variations not only in the statistical data but also as to their possible interpretation. Therefore a short description of both terms will follow, so that subsequently the interested reader will be able to better understand and appreciate any numerical differences, not only in this but perhaps also in other documents.

In all statistical records the term "economically active population" is one of the first to be encountered.



This term includes everyone 10 years old and over, who are either employed in some way or are looking for work - for the first or subsequent times. The chronological development of the relative figures in the period 1961-1981 are the following (7):

TABLE 7 Employed and unemployed in 1961 1971 1981 1961 1971 1981 1) Economically active population 3,638,601 3,244,768 3,543,797 2) Employed 3,423,431 3,388,518 3,143,040 3) Unemployed 215,170 101,728 155,279 4) Percentage unemployed 5.9% 3.1% 4.4% 5) Percentage of 1) on the total 43.4% 37.0% 36.4% 6) Percentage of 2) on

the total

In spite of the increase in total population of 4.5% between 1961 and 1971, the economically active population decreased by approximately 12% and at the same time its proportion of the total from 43.4% to 37%. The main reason for this development was the emigration of persons of the "best age", i.e. workers, towards Western European countries primarily. Their number at that time according to the calculations, had reached approximately 500,000 (8). Despite a natural population increase and a straight repatriation at the level of 330,000 persons in the 1971-1981 decade, the economically active population did not even return to its 1961 level, while its percentage of the

40.8%

35.8%

34.8%



total continued to fall and reached 36.4%. Employment figures show a similar development. As far as unemployment is concerned, the absolute figures and percentages are susceptible to some dispute and it is therefore useful to present here the most recent methods of verification.

Thus the second definition is encountered in the employment statistics. These statistics have been in effect in Greece since 1974; up until 1981 however they refer only to urban and semi-urban areas. From 1981 on-wards, the statistics also cover rural areas, which has significantly improved their degree of accuracy and their validity. As a base, a 1% sample from all the regions has been used. The main object of these annual surveys is:

- 1) a study of the employment situation in the population of household members (active and non-active)
  14 years and over, by sex, age, level of education, geographical area etc.
- 2) a study of the labour force by branch of economic activity, groups of self-employed etc.
- 3) a study of the duration of unemployment by sex, age, area etc.
- 4) a study of the employment situation, a year before the survey of household members 14 years plus a study of the existence or not of a second job for those employed etc. (9).

From 1983 onwards all persons who were 14 years and over are considered employed and ..ho

a) worked for one hour or more during the "reference



week"

b) did not work during the "reference week" but who had a job from which they were temporarily absent due to illness etc. (10)

This definition is in accordance with the decision of the 13th Conference of Employment Statisticians at the United Nations.

Persons 14 years and over are considered unemployed who

- a) are not working, i.e. did not work during the reference week nor were they temporarily absent from employment through illness, vacation, leisure, travel, strikes etc.
- b) were looking either for salaried employment or to start their own business
- c) were available and able to take on a job immediately which they may have found
- d) had taken some positive action to find employment (OAED, situations vacant in newspapers etc.).

This definition of unemployed differs somewhat from that for the years 1981 and 1982, so that there is no direct comparison of statistics through time, but which line up a somewhat more complete general picture of the last few years. (12)



TABLE 8

Labour force and	employment 1	<u>981–19</u>	<u>84 (mi</u>	llions)
·	<u> 1981</u>	1982	1983	1984*
Labour force	3.68	3.71	3.80	3.77
Employed	3.53	3.49	3.50	3.46
Unemployed	0.15	0.22	0.30	0.31
Percentage unemployed	4.1%	5.9%	7.9%	8.2%

#### \* : estimate

The difference between the 1981 figures with those of TABLE 6 is precisely due to the different employment definitions at the current time. At any rate, the above figures are considered by the Government as more valid and form the basis of economic measures and social policy. Already from TABLE 8 it can be seen clearly how acute the problem of unemployment became from 1981 onwards (at least from a statistical point of view since most probably in 1981 also, or even earlier, unemployment was not as low as the figures showed, but it was simply that the relative surveys were not reliable).

The unemployed almost doubled between 1981 and 1984, in absolute numbers as well as percentages. Of course, the problem is not as acute everywhere but there are great differences between regions, as the following figures show: (13)



TABLE 9

Percentage of unemployed by region

and their contribution to total unemployment in 1985

				Semi-	
			Other	Urban	Rural
	Athens	Salonica	Urban	Areas	Areas
Percentage of			·		
unemployed	11.6%	11.2%	9.8%	6.3%	3.0%
Contribution to					
unemployment	45.8%	10.1%	23.1%	8.8%	12.2%

From the above it follows that urban areas and particularly the urban centres of Athens and Salonica, suffer acutely from unemployment. On the other hand the problem seems smaller in the semi-urban and almost insignificant in the rural areas. Nevertheless in the latter case, there is room for some doubt if all the unemployed were recorded, since the high number of seasonal or part-time workers as well as the contribution of family members in agricultural work is well known.

The fact that around 56% of the total unemployed are concentrated in the two large urban centres of which 45.8% are in Athens alone, is particularly crucial.

If one turns to the more particular problem of unemployment of the young which has unfortunately taken on extremely dangerous dimensions in the last few years, the picture for the age groups (14-24) and (14-29) years is the following (14):



TABLE 10
Percentage of young unemployed
(of the total and by area in 1983)

	Percentage	Urban	Semi-urban	Rural
Age	of the total	Areas	Areas	Areas
14-24	42.8%	41.4%	46.9%	48.9%
14-29	59.3%	58.3%	60.7%	64.8%

According to these figures, around 60% of all unemployed are under 29 years of age - as an average across the country - while 43% are under 24 years. The problem intensifies as one moves out of the towns into the country, although a question arises which is worth careful study: is the average time that young people spend in the education system longer in the cities than in the country? If the answer to this question is an indisputable "yes", then the unemployment problem is not less acute in the cities than in the country, but it will simply reveal itself to its full extent with some time lag, i.e. when the young people emerge from the education system.

Referring to the duration of unemployment, the situation in the same year (1983) was the following: (15)



TABLE 11

Duration of unemployment by age group

in percentages of the total and by region in 1983

es of the	e cocar	and by	region	TH 1902
Up to	1-2	3-5	6-11	12 months
1 month	months	months	months	and over
10.9%	10.5%	18.4%	25.7%	34.5%
10.6%	10.5%	18.6%	25.6%	34.7%
13.0%	9.9%	19.4%	24.1%	33.6%
11.2%	10.9%	16.2%	27.8%	33.9%
12.5%	10.7%	18.5%	25.5%	32.8%
11.4%	10.6%	17.7%	25.0%	35.3%
	Up to 1 month 10.9% 10.6% 13.0% 11.2% 12.5%	Up to 1-2  1 month months  10.9% 10.5%  10.6% 10.5%  13.0% 9.9%  11.2% 10.9%  12.5% 10.7%	Up to       1-2       3-5         1 month       months       months         10.9%       10.5%       18.4%         10.6%       10.5%       18.6%         13.0%       9.9%       19.4%         11.2%       10.9%       16.2%         12.5%       10.7%       18.5%	1 month       months       months       months         10.9%       10.5%       18.4%       25.7%         10.6%       10.5%       18.6%       25.6%         13.0%       9.9%       19.4%       24.1%         11.2%       10.9%       16.2%       27.8%         12.5%       10.7%       18.5%       25.5%

On a panhellenic level persons remaining unemployed more than 6 months represent the 60.2% while those who are out of work more than one year are around  $\frac{1}{3}$  of all unemployed. These percentages differ relatively little between them if one compares the different regions. The differences are equally small between the young unemployed and the total, as regards duration of unemployment; if one excludes the age group (14-24) whose members seem to suffer somewhat less from long term unemployment of 6 months and over (58.3%). The validity of this hypothesis however is directly correlated to the duration, for which the young are already being kept under statistical observation.

A last but not least significant aspect concerns the situation of women on the Greek job market. According to the figures from the 1983 statistical survey of the labour force (16), the following picture results:



<u>TABLE 12</u> <u>Women and Employment 1983</u>

	<u>Total</u>	Women	Proportion
	(1)	(2)	(1): (2)
Labour force	3,807,500	1,289,200	34.1%
Employed	3,508,497	1,145,832	32.7%
Unemployed	299,003	152,368	51.0%
Unemployed under 25	127,900	76,167	59.6%
% unemployed	7.9%	11.7%	-

From this table it can be seen that the percentage of women unemployed is higher than that of the average total and of course even higher than that for men (52.8%). Moreover, young women under 25 suffer more acutely from unemployment than their male counterparts, since 60 out of 100 unemployed in this age group are women. If one compares the situation in Greece with that of the European Community, the following picture emerges for the year 1981: (17)

						Greece	EEC (9)
%	women	of	the	labour	force	31.9%	37.3%
%	women	emp	oloye	ed		31.4%	36.7%

At this stage it should be noted that this intra-European comparison will unfortunately be the only one in this chapter, since with regard to the collection of much more significant unemployment data, there are essential methodological differences between Greece and her Community partners. Thus the OAED, in its attempt to evaluate the extent of unemployment more precisely, is not able to record those young unemployed who are looking for first-



time employment, those part-time or under-employed as well as 'hose unemployed not on social security.

Characteristic of the confusion which prevails is the fact that in 1983, four reliable authorities or individuals (the OAED, the Ministry of Employment, the Ministry of National Defence as well as the Prime Minister himself) announced or used four different unemployment percentages: (18)



#### 2. THE ECONOMY

#### 2.1. Basic measurements of economic development

Within the very limited framework of this document it is not possible to give a complete and detailed picture of the Greek economy. For this reason reference will be made only to those basic measurements which are related - directly or indirectly - to vocational training. An important factor which is of interest is the development of the structure of the Gross National Product (GNP) through time, as shown in the following table: (19)

TABLE 13

Percentage structure of GNP

in the three basic economic sectors

	YEAR				
SECTOR	1963	1968	1973	1978	<u> 1983</u> *
Primary	25%	19%	16%	15%	14%
Secondary	25%	30%	35%	33%	3 1%
Tertiary	50%	51%	49%	52%	55%

#### \* : estimate

In the period 1963-1973 the contribution of the secondary sector increased from 25% to 35%, the primary decreased from 25% to 16%, while the tertiary sector's share remained almost steady at around 50%. In the 1973-1983 decade the primary sector continued to recede but at a slower rate, the secondary sector also receded (something which the Governments attributed mainly to external variables, e.g. the oil crisis), while the tertiary sector noticeably increased its share by 6 percentage points,



reaching 55%.

The level of per capita GNP, in comparison with the remainder of the community, with Spain and with Portugal, is given in the following table (20) (calculated on the basis of constant exchange values and on the 1975 cost of living index):

Per Capita Gross National Product (in US dollars)

	YEAR		
COUNTRY	1963	1973	1982
Greece	1144	2282	2619
Portugal	843	1700	1988
Spain	1680	2818	3090
EEC	3556	5248	6014

According to these figures, in the period 1963-1982 the distance between Greece and the EEC was reduced by 12 percentage points, i.e. the proportion of per capita GNP between Greece and the EEC increased from 32% to 44%. At the same time the difference with Spain was reduced (from 68% to 85%) and with Portugal also (from 136% to 132%).

The distribution of the labour force between the basic economic sectors showed the following development in approximately the same period: (21)



TABLE 15

Structu	re of the labou	r force by empl	oyment sector
SECTOR	1961	1971	1981
Primary	1960400(53.8%)	1330000(40.5%)	1129100(30.7%)
Secondary	691400(19.0%)	841000(25.6%)	1066600(29.0%)
Tertiary	986000(27.2%)	1111900(33.9%)	1482100(40.3%)
TOTAL	3638700(100%)	3282900 (100%)	3677800 (100%)

The structural changes here are much more in evidence than in TABLE 13. Thus in 1981, around 830,000 less persons were working in the primary sector compared with 20 years previously. Similarly this sector's share versus total employment decreased by 23 units, reaching 30.7%. On the other hand, in the secondary sector, an absolute increase of 375,000 persons took place as well as a percentage increase by 10 points, so that its contribution (to employment) rose to 29%. Finally, in the tertiary sector an impressive increase of 500,000 persons was noted, so that this sector, with a 40.3% share constitutes the largest sector of employment in the country.

Apart from the aforementioned, these figures highlight once more the catastrophic consequences of the emigration, mainly during the 1960 decade. Only with the "aid" of the repatriation did the number of employed in 1981 return to its 1961 levels(!)

If one wished to compare the structure of the labour force in Greece with that of the EEC of 9, the following picture emerges: (22)



Structure of the labour force by sector of employment
in Greece and in the EEC (9) in 1983
SECTOR

COUNTRY	Primary	Secondary	Tertiary
Greece	26.96%	28.62%	41.42%
EEC (9)	6.78%	35.69%	57.53%

It can be seen here then, that despite the structural shifts of the last 20 years, Greece continues to employ a high proportion of its labour force in the primary sector. On the other hand in the secondary sector the corresponding percentage is quite high while in the tertiary sector it is noticeably lower than in her remaining EEC partners.

Of course, the figures presented up to now on the structure of employment by sector refer to the whole of the country. If one wished to proceed to differentiate by region, then one would see significant variations as the following table indicates: (23)



TABLE 17
Structure of employment and income level by region

	Structure of employment by			Per Capita GNP	
		Sector (a)		(average = 100)	
Region	Primary	Secondary	Tertiary	(b)	
Evoia and					
Mainland Greece	7.8%	38.4%	53.8%	119.5	
Central and					
Western Macedonia	27.9%	35.9%	36.2%	97.5	
Peloponnese and					
Western Mainland	51.2%	20.6%	28.2%	88.5	
Thessaly	47.9%	24.1%	28.1%	86.6	
East Macedonia	49.6%	23.9%	26.5%	85.4	
Crete	50.8%	17.6%	31.6%	81.0	
Epirus	44.6%	22.0%	33.4%	73.5	
Thrace	58.6%	18.0%	23.4%	68.0	
Aegean Islands	31.7%	22.9%	45.3%	76.2	
(a) = 1081					

<sup>(</sup>a) = 1981



<sup>(</sup>b) = 1979

From these figures the sharp differences in the structure of employment from region to region can be clearly picked out. Thus eg. region (1), which includes the capital city of Athens, presents a structure which is quite similar to that of the other Community member-states and correspondingly achieves a GNP performance which is 20% higher than the national average. The only region approaching 100 is region (2), probably because it includes the greater urban area of Salonica. With regard to the large difference between the upper and lower levels of employment percentages in each sector, it can be seen that in the primary sector the percentages vary from 7.8% to 58.6%(!), in the secondary sector from 17.6% to 38.4% and in the tertiary from 26.5% to 53.8%.

#### 2.2. Vocational training and economic requirements

All these figures bring out the extensive, almost radical restructuralisation of employment which took place during the last 20-25 years in the three basic sectors of the economy. Thus, hunderds and thousands of people not only changed their job, but often experienced an entirely new working environment, for example when they left agricultural or family employment to work in recently established - in the main - industrial concerns. It is worth noting here that these kind of "reshuffles" are often associated with a strong trend of drifting towards the cities (see Chapter 1), which moreover has, in many cases followed the socially distressing "roundabout road" of emigration-repatriation.



Within the scope of the above developments, great and varied demands were placed on the education system as was to be expected - and particularly in the area of technical-vocational training. Specifically, there was an ever pressing necessity to take such steps in educational policy, so that from a qualitative, quantitative, job structure and town planning point of view the country's labour force could be suitably prepared - with relatively minimal friction while adapting - to respond to the constantly changing employment market conditions. to forestall possible misconceptions, it should be noted that orientating the educational programme to the economy's needs cannot be considered its only object or an end in itself. On the other hand however this affirmation - expressed from a position in favour of a broader education policy - cannot constitute an "alibi" for omission or complete non-existence of some relative programming, which is necessary at least as a framework guideline.

As will be more clearly seen in the following chapters, the Greek education system, with its organisational weaknesses, its operational irregularities and qualitative deficiencies, with its insistent - societally dictated - orientation towards general education, as well as its traditional sluggishness to adapt to the current socioeconomic developments, has not been capable - at least in the greater part of the post-war period - of responding to the new requirements. More particularly, the technical-vocational training sector failed not only to foresee the changes etched on the horizon and to set up the necessary



structure - a prerequisite for their best exploitation, but even found it difficult to follow up the relative developments after the event. (24)

The three following characteristic examples, indicatively referred to,  $^{(25)}$  clearly illustrate these weaknesses.

a) Agriculture - which almost totally accounts for the primary sector - continues to play a significant role up to today - despite the decrease in its relative contribution in recent years - to the employment sector, where it covers almost  $\frac{1}{3}$  of the total (see TABLE 15). vities of the education system however, aimed at a suitable professional preparation/education of the labour force in this kind of employment were rare, if not non-existent. Thus, in 1971 the number of students who were studying agriculture in vocational schools (not including university level) represented only 0.3%(!) of all students in technical-vocational training, (26) in the period 1973/1974 up to 1976/1977 only 0.5%, (27) while in 1983/1984, i.e. after the reformation of secondary level technical-vocational training and the slight momentum it was given, agricultural students reached 7% of the total in technical-vocational lykeions. (28)

The imbalance which exists between agriculture's (and the primary sector's) contribution to overall employment - a little less than  $\frac{1}{3}$  - and that of its contribution to total GNP - around 1/7 - is indicative, despite any excu-



sable reservations, of the low productivity of this sector. If one bears in mind the established view that a suitable vocational structure and quality of training are basic parameters which can positively influence productivity, this, combined with the more important gaps in agricultural training which had been previously identified, then it is easy to comprehend how great are the margins for improvement here.

b) The number of recognised professions which require some relative secondary level education constitute (in a positive correlation) an important indication of the level of development of a country's vocational training. Thus, while in Greece the number of recognised professions have remained for the last 15 years at around 80 - with a slight increasing trend - in other countries with greater or lesser industrial development this number reaches the hundreds, for example 308 in Poland, 306 in East Germany, 498 in West Germany and 185 in Rumania. (30)

That which is more interesting however than the absolute numbers, is their development. Specifically, in the post-war years in Greece there was an attempt to meet the current requirements of the economy and mainly industry with the gradual addition of some new skills. On the other hand, in the countries referred to above, a reverse trend was observed: while earlier there had been a gradual specialisation (and an increase in the number) of professions, as a reflection of the then rapidly increasing partition of jobs, in recent years a trend towards grouping



or consolidation of professions appeared, with a relative decrease in their number. This quite recent development is mainly due to two factors:

- i) to the reform of the organisation and content of work particularly in the secondary but also in the tertiary sector due to the introduction of new technology and micro electronics, when not a few professional qualifications became common in more employment situations than one (basic knowledge of a broad economic subject, ability to establish priorities, a clear notion of the workings and maintenance of mechanical installations, alertness and flexibility in dealing with unexpected situations, a sense of responsibility, self-discipline etc.).
- ii) to the increasing rate not only of inventions but also of industry in making use of technological innovations. This rendered those very specialised professions and abilities open to technological change and consequently more short lived. The demand was therefore for the greatest possible adaptability of the labour force to these changes. To achieve this adaptability it was considered that providing at first a broad, basic professional knowledge was the most suitable application of training (as was subsequently implemented), which would then be accompanied and supplemented (in the form of a "pyramid" progression) by successive as well as flexible specialisations. One of the consequences of this new trend in vocational training was also a decrease in the



number of recognised professions. The recent example of West Germany is referred to here as typical, where in the metal-working sector, 42 "old" jobs are consolidated into 6 "new", while in the area of electrology 4 "new" will replace 12 "old" similar jobs. (31)

- It is worth pausing at this point for a moment ( ن on Industry, which is without a doubt the nerve centre sector, whose size and qualitative development upon which the economic, social and political development of the country will be determined. As was stated also at the beginning of this chapter, the limiting framework of a document does not permit - among other things - a more indepth analysis and evaluation of the singularities of the progress of Greek industry up to today. (31a) Hence, cer-· tain of its fundamental qualitative weaknesses which are undoubtedly closely correlated with its impressive rate of expansion after the second world war, will be referred to in outline only. Parallel to this, some of these touch more or less on the network of questions relating to vocational training. Such weaknesses, which are up to a point, interrelated:
  - 1) low percentage of domestic added value
  - insufficient inter and intra category communication with trends towards further slack-ening (of ties) in the last decade which might have had a multiplying and/or accelerating effect on industrial development
  - 3) almost total technological dependence on foreign sources



- the decisive role of foreign direct investment whose reduced inflow in the last few years has significantly weakened development efforts in the above sector
- overwhelming majority of small-scale industrial units, with very low productivity, without a self-generated technological base and with few organisational liaisons between them.

Moreover, the events and developments of the last 10-15 years should be added to the above, such as a progressive transformation towards traditional branches, the dissociation of domestic demand from domestic production, with a parallel decrease in the competitiveness of domestic industrial products (despite the existence, even up to today, of protective measures) and an inability to follow new developments taking place in various industrial nations (advanced technologies, new products etc.). (31b) All these make up the main reasons why in the last few years Greek industry has lost its position as the major factor in economic growth and has ceded it to the service sector.

As far as the relationship, then, between certain of these characteristic points of Greek industry with the operational methods and objectives of the country's vocational training is concerned, the complications which arise ar - among others- the following:



i) the division of industrial operations on the one hand into a very large number of very small units with numerous examples of low development levels - in the main - and on the other hand into a very small number of relatively large units with a progressive - as a rule - job structure, higher capital concentration than in the first group and some automation of production; which reflects - in a general way - a parallel "dichotomy" also in the "profile" of the professional qualifications in demand for employees in each of the two "groups" of operations.

The vocational training system should contribute to the staffing of industrial units of all kinds with suitably skilled personnel, so that not only the less developed can be helped to restructure and update themselves but also so that the relatively up to date can more or less follow the newer technological developments (e.g. military industry). A significant difficulty - if not the most significant - in this objective, lies in the formulation of such content and combination of educational programmes with which the best possible results from the point of view of students can be achieved, without any conventional or unconventional differences or "dry-ups" in the allocated specialisations, which either would limit horizontal mobility of students or would compromise the equality of graduation certificates of the same degree.



ii) In countries which themselves produce technology, the employees participate to some degree - depending on their employment sector - in the process of research, development, production and exploitation of the new technology. This contributes to their smoother adjustment to the possible new requirements of their job. In conjunction, the consequences of the introduction of the (current) new technology into the structure and content of professions is followed, carefully and systematically, as a rule, so that there is an opportunity to convert the relative analyses into suitable policy for vocational training.

In Greece, with the almost complete dependence of its industry on foreign technology, there is not a single - state or private - body which systematically follows related international developments, so that it could be in a position to suggest, to judge, to advise or to coordinate the most suitable ways of disseminating technology to the country - according to circumstan-A complete lack of information and concern as regards the training required in adapting the labour force to the imported technologies can be observed, such training is carried out only occasionally and as circumstances dictate, and as a rule only after the arrival of the new mechanical equipment in the country. Thus, there is an acute factor of "being taken by surprise" in the vocational training system, which renders the already methodologically disputed and objectively non-existent programming in this edu-



cation segment according to the countries' needs, even more difficult.

Vocational training (should) aim to provide suitably skilled personnel not only from the point of view of quantity and quality but also geographical distribution. Despite possibilities for geographical mobility of the labour force, one of the objectives (should be) the training of the labour force - where possible - in the places where the demand for those skills manifests itself. In Greece, particularly large inequalities can be observed between regions as reards the structure of employment (see TABLE 17). But if training programmes were oriented to existing circumstances alone, they would also contribute in perpetuating an unacceptable imbalance in the distribution of economic (and other) activities and resources between the various regions of the country. this reason, vocational training undertakes - among other things - the additional duty of "going against the current" of concentration of population in the cities, that is, in combination with the country's broader 5-year development programme of operating as a prerequisite for economic activity and not as a consequence. In other words, it is called upon to create a training base for professions in areas where demand has not yet developed, but which, based on longterm programming - should facilitate the installation of businesses from certain sectors and branches of the economy, with corresponding labour force requirements.



2.3. The correlation of the labour force structure, with the current and future, general and skilled needs of

the economy and society, by level and branch of training, by category of economic activity and employment situation, has for several years been the object of intense public debate and "unfulfilled desire" of all those interested in the country's educational matters. The two attempts at such programming which were carried out in Greece (one by the OECD, for the development of the Mediterranean region with a programming perspective from 1965-1979, and one during the Junta period, based on the 15-year development programme 1972-1987), did not achieve the hoped-for results, due as much to certain basic mistakes made in the original projections, as to - in the main - manifest weaknesses in the implementation, monitoring and corrective stages during the execution of the programmes. (31c)

The depiction of the situation in Greece today (see Annexe, Tables I to IV) shows that such attempts are now even more essential, particularly in the area of vocational training, where the great demand for corresponding skills is in distinct contrast with the insistence of the majority of young people on university studies (although a slight shift can be perceived recently). Already, from the second half of the 70's decade certain new and highly commendable attempts have been made by the YPEPF (Ministry of Education) the KEPE (Centre of Planning and Economic Research), the OAED and the EOMMEH (Hellenic organisation of small and medium sized processing and handicraft businesses) for forecasting short - and medium term socio-



economic needs and anticipating the corresponding educational programming. (31d) It is not of course possible or desirable to refer at this stage to possible reservations or objections about the methodology followed by one or other researcher. That which will play a decisive role in this case - as in the previous ones - is also to what extent the above studies - either each on its own or as part of an overall evaluation - will be used as a guideline and tool for educational programming or whether they will simply remain as documents of theoretical interest and The relative challenge for those responsible for educational programming lies in their ability to pick up and process the "messages" from the job market, to clarify and prioritise the Government's strategical educational objectives, to propose and implement flexible measures of educational policy and finally to provide the necessary procedures for continuous monitoring of the programmes' progress, in order that corrective measures can be taken at the right time. Experiences with existing administrative mechanisms up to today do not permit much optimism for accomplishing such a long-term and painstaking effort.



### 3. SCHOLASTIC EDUCATION AND VOCATIONAL TRAINING

### 3.1. General

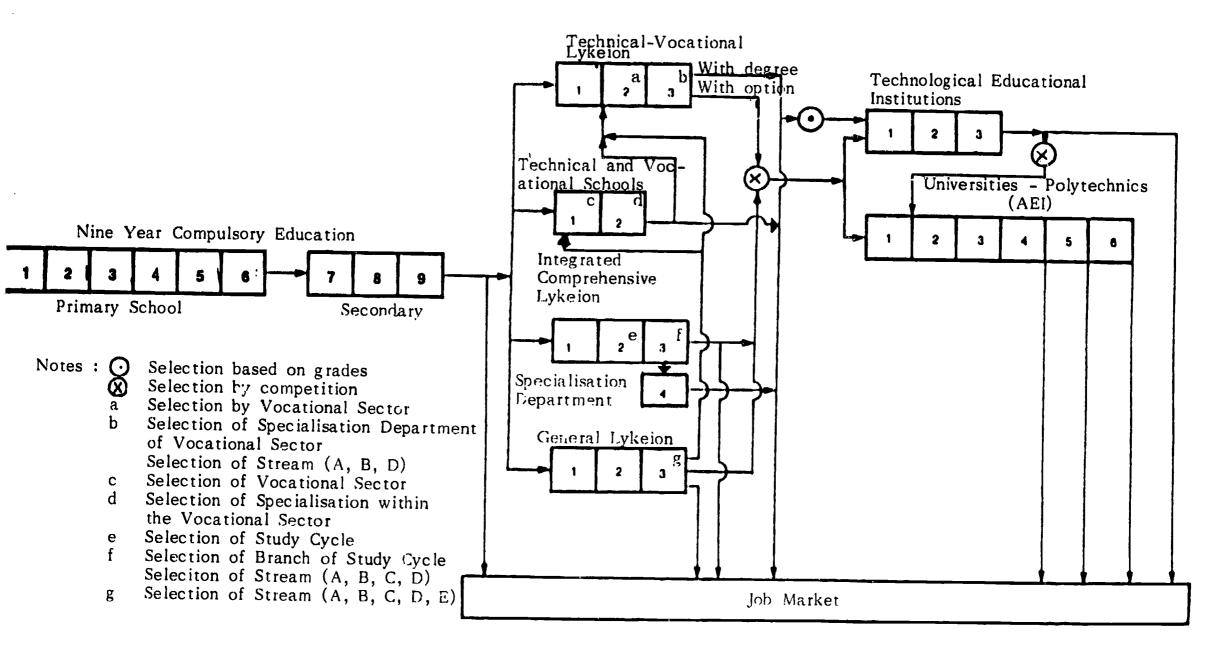
In this chapter, attention will first be paid to general and vocational education/training, which is available immediately after the end of the 9-year compulsory education (6 years of primary (Demotico) and 3 years of secondary (Gymnasio)), while subsequently reference will also be made to tertiary-level vocational training. As can be seen from the figures in the following table, the extension of compulsory education from 6 to 9 years began to be applied towards the end of the 70's decade. (32)

TABLE 18
Number of enrolled students

Scholastic Ye	Primary ar ( <u>Demotic</u>	Secondary (Gymnasio)
1977/79	931,860	365,585
1978/79	922,740	378,552
1979/80	910,576	406,374
1980/81	902,558	434,634
1981/82	901,209	448,935
1982/83	892,509	438,937
1983/84	896,339	423,581

The number of enrolled students in the primary schools shows a slight decreasing trend, while at the same time that of the Gymnasion students is noticeably increasing, after the application of law 309/1976. A preliminary examination of the figures in the two columns leads to the conclusion that the 9-year compulsory education period has







not totally taken effect, which is regarded rather as something to be expected, with such a wide-ranging new law.

Upon completion of their secondary education, the graduates are confronted with various further choices for their general or vocational education/training. Their selection is no longer subject to any restriction from the viewpoint of the education system, following the abolition in 1982/83 of entrance examinations to all types of Lykelions (higher cycle secondary education). In the preceding diagram 1 the overall structure of the Greek education system is presented, with all its options of vertical and horizontal student mobility. (33)

It would of course be ideal, if one could complete this structural diagram of the education system with a corresponding diagram of the student body's movements. Unfortunately however in Greece, valid figures relating to the overall educational and vocational development (from the beginning to the end) of an age group are not available. At any rate, according to rough calculations (34) which refer to the early 1980's, starting from an annual birthrate of around 145,000 it is estimated that:

145,000 enter primary schools (Demotico)
149,000 graduate from the above
161,000 enter secondary education (Gymnasium),(the
difference between graduates of the Demotico and
entrants to the Gymnasium is due on the one hand to
demographical reasons and on the other to the fact
that some earlier Demotico graduates enter the Gym-



nasium after a time lapse, since the time when the Gymnasium became compulsory).

126,000 graduate from the Gymnasium Entry into post-gymnasium education is the following:

102,000 to the General Lykeions

21,000 to the Technical-Vocational Lykeions 5,000 to the integrated Comprehensive Lykeions (after 1984) and

20,000 to the Technical-Vocational schools (the difference between the entrants and the exitors of the Gymnasiums is due as much to demographic reasons as to the fact that many come to post-gymnasium education after a time lapse).

At the end of the higher cycle of secondary education around:

71,000 graduate from General Lykeions and

17,000 from Technical-Vocational Lykeions. Candidates for the general entrance examinations for tertiary education are over 100,000 (they are more than the number of graduates from post-gymnasium education, because many take part in the examinations a second time). From these:

- 25,000 approximately enter university-level institutions and around
- 20,000 to the TEI (Technological Educational Institutions) or other tertiary level educational institutions.

An unverified number of students (not less than 7,000) leave for studies abroad.



## 3.2. Opportunities for post-Gymnasium (lower cycle secondary education)

The graduate of the Gymnasium, after a 9-year compulsory education can choose between the following alternatives (apart from a direct transfer to the job market):

3.2.1. General education, which is essentially covered by the 3-year <u>General Lykeion</u> (higher cycle secondary education), and which has as its aim the completion of the general education of those youngsters who - initially - wish to later pursue their studies in tertiary education. In these Lykeions graduates of the Gymnasium aged up to 18 years are accepted. For older youngsters there are the evening Lykeions where, however, the period of study lasts 4 years.

At the end of the first two years the students sit competitive examinations in all subjects (minus that of physical education and career planning). In the third year, which is principally preparatory to further studies, general subjects common to all students are taught on the one hand, and specialised subjects for each of 4 streams on the other, which correspond to the same number of similar subjects in tertiary education (e.g. the 1st stream being mathematics, physics, architecture etc., the 2nd being medicine, dentistry, veterinary studies etc., the 3rd being philology, history, teaching etc., the 4th being politics and government sciences etc.). Recently a 5th stream was also created for subjects "of general"



interest" for those students who for various reasons do not aspire to apply for a seat in tertiary education through the general entrance examinations, but who simply wish to obtain the Lykeion graduation certificate.

Graduates of the General Lykeion have the following options:

- a) If they succeed in the general entrance examinations they join the department corresponding to their stream.
- b) If they succeed in the examinations but not to the department of their first preference, they can resit these exams the following year either in the same stream or in another.
- c) Graduates from all streams can enter the job market.
- d) Those who in particular had chosen the 5th option can follow the stream of their choice in the post-Lykeion preparatory centres (MPK) and sit the general examinations the following year.

In the area of vocational education/training the following types of schools will be in operation:

3.2.2. Technical and Vocational Schools, whose objective is for the students to consolidate the knowledge they learned in the Gymnasium and to master the abil-



ity to exercise a particular, skilled profession. These schools offer 14 departments overall, with 49 programmes, of which 32 are already in operation. Specifically, the departments are the following: (35)

- (1) Mechanical Engineering
- (9) Tourist professions

(2) Electrology

(10) Gold and silver

(3) Electronics

smithing and watch-

(4) Building construction

making

(5) Agriculture and cattle (11) Leather goods breeding

processing

- (6) Dress-making and housekeeping
- (12) Hair-dressing

(7) Handicrafts

(14) Mining

(13) Spinning

(8) Office procedures and

commercial retailing

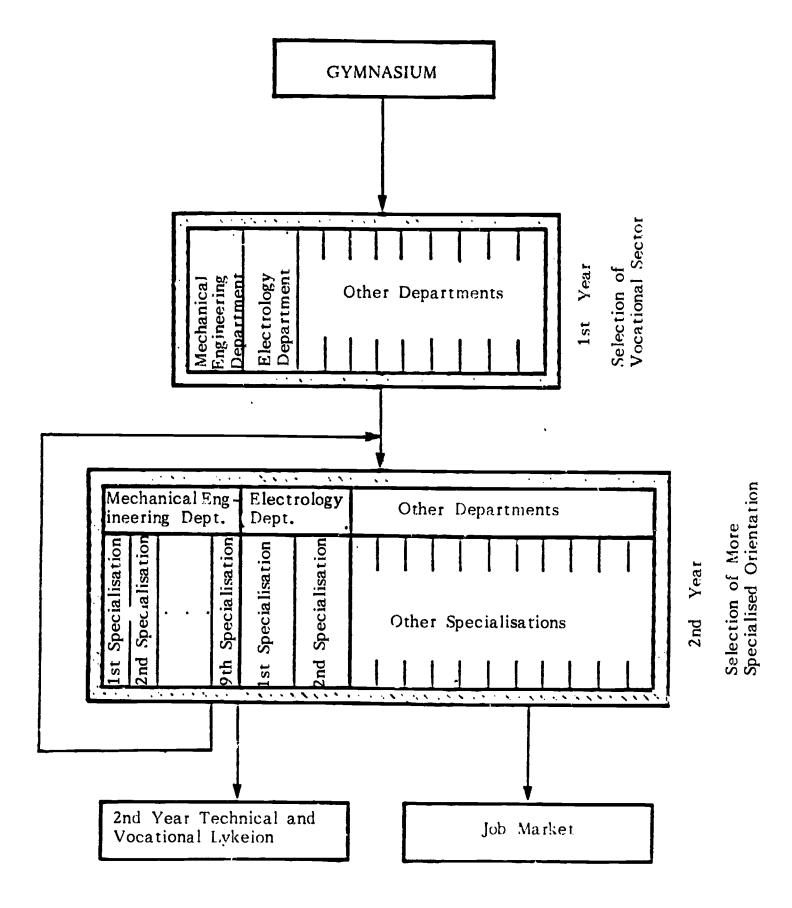
Administratively and organisationally the TES, together with the Technical and Vocational Lykeions (which are discussed immediately below) make up integrated scholastic units; the so-called Vocational and Technical Training Centres (KETE).

The duration of study in these schools is 2 years, except for the evening schools which were created for working youngsters and which last 3 years. The student chooses a vocational sector in the first year and a more specialised orientation from the same sector in the second year. General educational subjects of 6 hours represent 20% of the overall currie-



#### STRUCTURE AND OPPORTUNITIES OF THE TES

#### Diagram 2:





ulum, while the more specialised subjects of 24 hours represent 80%. This is carried through from the first to the second year. Student practical experience is obtained in ex-scholastic and suitably equipped workshops. TES graduates can then either follow a career in their chosen vocation or enrol in the second year of any Technical and Vocational Lykeion.

3.2.3. Technical and Vocational Lykeions (TEL) provide the students with a general education deeper than that of the Gymnasium and at the same time supply them with all the technical and vocational knowledge and skills which are prerequisites for success in a vocational sector. The Technical Lykeions are made up of 7 departments with 27 programmes, of which 25 are already in operation, while the Vocational Lykeions have 5 departments with 21 out of 25 programmes in operation. Specifically the names of the departments are as follows: (36)

#### a) Technical Lykeions

- a1) Mechanical Engineering a5) Chemistry and
- a2) Mechanical Engineering and Electronics
- a3) Construction
- a4) Spinning

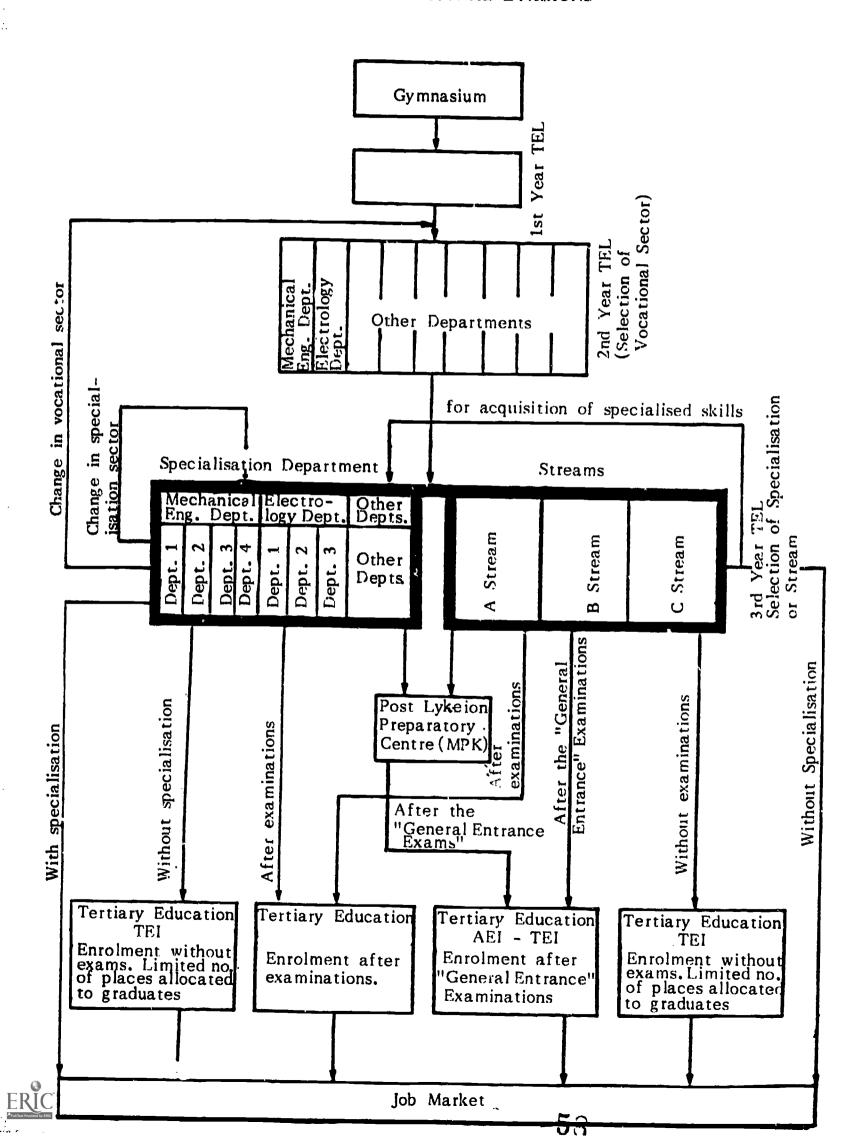
- a5) Chemistry and Metallurgy
- a6) Applied Arts
- a7) Information Technology

#### b) Vocational Lykeions

- b1) Economics and Government
- b2) Agriculture and
- b3) Social Services
- b4) Naval Training
- b5) Naval Studies -



Diagram 3: STRUCTURE AND OPPORTUNITIES OF THE TECHNICAL AND VOCATIONAL LYKEIONS



Cattle Breeding b3) Social Science

alternating training periods

The course duration here is 3 years for Gymnasium graduates or 2 years for graduates of any type of Lykeion while in the TEL evening courses it is 4 or 3 years respectively - with a shorter teaching timetable. Specialisation begins in the second year, where the students choose initially a vocational sector, while in the third year they choose either to specialise in the area of their original choice or one of three options, which have already been discussed in 3.2.1. The opportunities available to TEL graduates are of course greater than for those of the Specifically: in exercising a profession in their chosen specialisation: the ability to obtain a second degree from another sector of specialisation : enrolment in the Technological and Educational Institutions or in the Institutes of Higher Education (AEI) and so on. In the following diagram, all the relative opportunities for the graduates are laid out in detail. (37)

After a careful examination of all the choices open to TEL graduates, it becomes clear that these educational institutions aim not only to offer specialised vocational training but at the same time also to keep the road to tertiary education open. This effort is more than commendable in a country such as Greece, where compared to the traditional dominance



of general education, technical-vocational training is almost marginal, having to fight against - amongst other things - 2 strong negative aspects as well, which have created a corresponding negative attitude on the part of students and parents:

- the widely-held view (and perhaps not without some justification) of public opinion that the TEL are not, in the final analysis, equal to that of the General Lykeions.
- ii) the lack of real professional and official recognition of TEL graduates.

In addition to the above, entrance examinations to the various types of Lykeions after the Gymnasium were abolished in 1982/83, when the students therefore gained complete freedom of choice between the two Lykeions. With this political decision, the Government was looking to create at least the impression of an organisational-operational equality between general and vocational education, where the flow of students towards the latter would be maintained, at least initially, at the same levels as before. For the same reason, the possibilities for horizontal student mobility both ways between general and technical-vocational Lykeions were extended or increased. The fact that the vocational training provided by the TEL are purely scholastic - perhaps from a mainly psychological viewpoint - played a beneficial



part here. If one carefully studies the structural and some operational characteristics of the TEL from a benevolent viewpoint, one can distinguish some potential - although still in an embryonic and confused state - in implementing the pedagogical proposals for an education "by stages" and "graduation with two options." (38)

The preference of Greek youth for general education, with prospects for further studies in tertiary education, has remained unabated in recent years, as can also be seen from the following tables. (39)

TABLE 19

Total number of registered students in post-gymnasium

(lower cycle secondary education)

Scholastic	General			
Year	Lykeions	TEL	TES	TOTAL
1980/81	210907(74.5%)	47700(16.9%	24416(8.0%)	283023
1981/82	222492(71.5%)	66185(21.2%)	22678(7.3%)	311355
1983/83	241147(71.3%)	78090(23.0%)	18932(5.7%)	338169
1983/84	253000(73.3%)	76354(22.1%)	15638(4.6%)	344992
1984/85	260498(74.4%)	72709(20.8%)	17024(4.8%)	350231

# TABLE 20 Entry to Tertiary Education

#### Candi-

Year	dates	AEI	TEI (KATEE)	Other	Total
1981	74922	14746(53.6%)	9715(35.3%)	3068(11.1%)	27529
1982	84370	16880(49.3%)	13708(40.1%)	3591(10.5%)	34179
1983	110781	190 <b>9</b> 2(47.8%)	16429(41.0%)	4540(11.4)	40061
1984	130873	22880(45.3%)	22170(43.9%)	5463(10.8%)	50513
1985			22912(43.8%)		

- 3.2.4. In the face of this unchanging and unsatisfactory situation from many different viewpoints, the Government took the major step, among others, of establishing greater credibility as to the equality between general and vocational education. At the same time it hoped with this action to raise the quality of the teaching provided, making it more flexible and adaptable to the different interests, inclinations and abilities of the students. It concerns the creation of a new type of school, the "Integrated Comprehensive Lykeion" (EPL). The main aims of the EPL are, among others:
- a) to tie general education in with that of technical and vocational, rendering the students capable of combining theory with practice and application.
- b) to offer the student transferable (general and technical-vo:ational), scientifically-based know-ledge and particularly the methodology of acquiring



knowledge.

A series of the series of the

- to contribute decisively to overcoming traditionally deep-rooted prejudices, which look down upon practical and, in particular, manual labour and which under value technical-vocational training.
- to offer the students the opportunity to transfer from one course of study to another, in such a way that it will not prejudice their training or the status of the course to which they are transferring.

In the scholastic year 1984/85, 14 such Lykeions were opened experimentally all over the country - and particularly in large cities - a total of 4460 students.

The structure of the EPL to date is more or less the following:

The first year is common to all students. Out of the 34 weekly teaching hours, 31 are set aside for common subjects and 3 for selected subjects such as e.g. aesthetic appreciation, biotechnology and elements of law.

The second year is divided into 6 courses. Each student can choose the course which interests him, irrespective of the subjects he had chosen in the first year. The allocation of weekly teaching



hours is 16 for common subjects, 16 for specialised subjects corresponding to the chosen course and 2 for free choice subjects.

The third year is separated into 14 branches which are grouped into the 4 streams, which were discussed earlier. Out of the total 34 weekly teaching hours, 14 are allocated to common subjects while the rest are allocated to the specialised subjects of each branch.

In addition to this, the EPL are affiliated to the so-called "Specialisation Departments" which are independent and work together with industrial bodies and which accept third year graduates for specialisation and supplementary training.

- 3.2.5. <u>In the Greek Merchant Navy Lykeions for</u>
  Officer Cadets (DAEN) the following departments operate:
- a) Captaincy
- b) Marine Engineering
- c) Radiotelegraphic Operators

Gymnasium or graduates from equivalent schools up to the age of 18 can register. Entrance is gained to these schools by selection, where the criterion is the final grade in certain subjects. This typical training, offered since 1979 and which lasts 6 semesters (or 8 in the evening lykeions), is mainly of



scholastic nature and is completed by a period of some practical experience.

Graduates from the D.A.E.N. Lykeions receive a certificate which is equal to that of the General Lykeions. If they wish to pursue studies in tertiary education, they have the same opportunities as graduates from the Technical and Vocational Lykeions (TEL). But mainly they can begin a professional career in the Merchant Navy as Officer Cadets, with the following development in each department:

a) <u>Captaincy Cadets</u>: After a 24 month service at sea, they sit examinations and obtain a 3rd Class Captain's diploma. Subsequently, after a 36 month service at sea and examinations, they obtain a 2nd Class Captain's diploma.

In order to proceed to a 1st Class Captain's diploma, they must follow additional training (the PRODE) on board ship for 2 semesters and 2 more semesters in the Higher State Schools of the Merchant Navy (ADSEN).

This course can be begun either immediately after their graduation from the Lykeion or later, when they find the opportunity. In the first case they can obtain the 3rd Class Captaincy diploma without sitting examinations.



the season of the second

month service at sea they sit examinations for the 3rd Class Engineer's diploma and subsequently, after a 36 month service at sea and examinations, they receive a 2nd Class Engineer's diploma.

In order to obtain the 1st Class Engineer's diploma they must follow additional training (PRODE) for 2 semesters in the ADSEN.

They can begin this course either immediately after their graduation from the Lykeion or later, when they find the opportunity. In the first case, they can obtain the 3rd Class Engineer's diploma without sitting examinations.

Radiotelegraphic Operator Cadets follow 2 semesters of additional continuous training (PRODE) on board ship and 2 semesters in the ADSEN and after a 12-month service at sea they receive a 2nd Class radiotelographic operator's diploma without sitting examinations. Subsequently, after a 24 month service at sea and examinations they receive a 1st Class Radiotelegrapher's diploma.

The importance of these types of Lykeions is very small, not only within the overall vocational training sector but also in that sector which is under the jurisdiction of the Ministry of Mercantile Marine. The already small number of students is showing a



decreasing trend. In 1981/82 the highest level was 200, 80 and 120 students respectively in the three categories mentioned above. A similar decrease also occurred in the total number of State Lykeions of the D.A.E.N., from an initial 8 all over the country, to 3.

The Ministry of Mercantile Marine is already seriously considering whether to abolish this type of school completely and concentrate its activities only on Higher Education (which will be discussed a little These considerations are not of course unrelated to the long term crisis which shipping is undergoing all over the world and particularly the Greek Merchant Navy. It is worth mentioning here an example which highlights the lack of coordination and waste of resources in this vocational-training sector: alongside the Lykeions which ope. ate under the aegis of the YEN (Ministry of Mercantile Marine), another 6 are being operated, the so-called Naval Lykeions under the aegis of the YPEPF (Ministry of Education), which (with the exception of the Lykeion for alternating periods of naval studies on the island of Simi), have exactly the same programme and study content as those of the YEN(!)

Generally one can say that the YEN tries and does adapt relatively quickly not only to current but also to future indications of the merchant navy's job market requirements. Amongst the reasons which enf-



orce such flexibility is the fact that naval training has such a high cost and that this is covered in great measure by funds from Greek shipowners who suscribe large sums of money to the "Naval Training Fund". One characteristic example is the planned abolition of the traditional training for radiotelegraphers, after the gradual replacement of the wireless with modern telecommunications methods (satellite etc.) and the subsequent radical change in the relative professional qualifications. This was the reason why no more students enrolled in the radiotelegrapher department in 1983/84.

3.2.6. In the <u>Middle Technical and Vocational Nursing Schools</u> young men and women can train as "nursing assistants" in order to subsequently fulfil hospital and other medical institutions' needs. 22 such schools operate nationally, the overwhelming majority (except 3) are state-owned and are subject to the Ministry of Health and Welfare's supervision.

eligible to enrol, but in practice 90% of registrations are Lykeion graduates. If there are more candidates than available seats, their selection criteria will be based on their graduation grades. The course usually lasts 2 years with one exception, for which there is an evening school and which lasts 3 years. The schools are integrated into the same number of hospitals. The training provided is for the main part



alternating. After a first 6 months of exclusively theoretical teaching, practical experience alternates with theory either day by day or for longer time periods.

Graduates of Middle Level Nursing Schools are able to exercise their profession immediately or if they wish they can enrol in the second year of the General, the Technical or Professional Lykeions.

In 1983/84 1400 students enrolled, while around 1900 enrolled in 1984/85. The percentage of drop outs from these schools is very low, while demand for graduates is very high. It is perhaps one of the few cases in Creece where the demand in the labour force for a certail skill surpasses the relative supply by a large margin. Specifically, according to estimates from the Ministry of Health and Welfare, today's supply is 19000 - 20000 people while the corresponding needs of the country are set at 40000.

- 3.2.7. Basic training for the tourist industry usually follows the Gymnasium and consists of the three following departments:
- A) Hotel and Restaurant Department. Young people aged 16-25 years are accepted here, as long as they hold a Gymnasium graduation certificate and have been successful in the corresponding entrance examination. In cases where places remain vacant, Lykeion



or other equivalent school graduates can enrol without examinations but only after personal interview. Studies last 1 year and are divided into 2 cycles, a theoretical and a practical.

In the period 1958-1982, 6398 students graduated from this department while the average annual number of entrants in recent years is around 700.

- ments here are the same as before. The course lasts 2 years and consists of 2 annual cycles, a theoretical and a practical. In the period 1958-1982, 973 stulents graduated from this department while the most recent average annual number of entrants is around 90 students.
- In spite of the fact that only Lykeion or other equivalent school graduates are accepted here, this department is referred to this sector because it also includes basic tourist industry training. Candidates for enrolment must sit the corresponding entrance examinations. The course lasts 1 year and is also divided into a theoretical and practical cycle.

Up to 1982, 314 students in total have gradu ed from this department, while the most recent average annual number of entrants is around 30 students.



Training in the three above-mentioned departments is given in the 7 Schools for Tourist Professions (STE) in Anavyssos, Salonica, Corfu, Rhodes,
Alexandropoulis, Nafplio (note however that the 2nd
year operates only in the first two schools, while
the 3rd year only in the first).

Basic tourist industry training aims to create able and skilled personnel to staff hotel operations. STE graduates have good prospects for a worthy professional career. According to the collective work agreements for hotel employees, they enjoy advantageous treatment over their non-graduate collecagues. On the contrary however their legally supported priority in the procedure for new employees is rarely implemented in practice.

3.2.8. Finally, some other options for post-Gymnasium vocational training will be outlined, which supplement or complete this section on the Greek vocational training system. The brief presentation of these schools is due not only - or mainly - to the fact that quantitatively they cover an insignificant number of students in this sector but also to the fact that the form and content of the corresponding programmes neither stand out in terms of quality nor do they contain innovative elements - in comparison with all the previous programmes - so that they are not worth special, analytical mention. (42) More specifically these schools are:



- a) the two <u>Agricultural Schools</u> (Dairy-farming School of Ioannina and Agricultural School of Syngrou).
- tional Lykeion of Fine Arts (Preparatory-Vocational Lykeion of Fine Arts in Tinos, Schools of Cinematography and Dance, Conservatory and Music Schools, which are all private schools in the main).
- The Ecclesiastical Gymnasiums and Parallel Education Institutes.
- The various boarding colleges of non-rofit public companies (College for OTE personnel (organisation of telecommunications), Technical Schools of the DEH (electricity board), ELTA (Post Office), HLPAP (transport company of Athens and its suburbs), OA (Olympic Airways) etc.), which provide basic vocational training to part of their newly employed personnel.
- e) The Military Schools for Permanent Non-Commissioned Officers (SMY), of the Army and
  the Navy as well as Security and Harbour
  forces' schools.
- 3.2.9. All the cases described more or less analytically in sections 3.2.2. to 3.2.8. come under the normal education system. The following case to which we will refer, on the other hand, is of a more or less atypical nature. In spite of the fact that quantitatively in the vocational training system with regard



to number of students - it is not particularly important, its format is of interest and is continually developing, while graduates from these schools are in great demand on the job market.

Speficically we refer to the so-called Apprenticeship programme which has been provided for many years (from the beginning of the 50's decade) by the Organisation for Manpower Employment (OAED) and which shares - particularly recently - significant similarities with the "dual system" of vocational training in West Germany.

Up to its reform which began in 1984/85, the Apprenticeship programme had the following form: (43)

The students would work in private or public companies during the day, in work places corresponding to the skill they were studying, while 4 afternoons a week and for 14 hours overall they would attend the "Apprenticeship Centres" of the OAED, where they would follow theoretical subjects and workshops.

With the beginning of the 1983/84 scholastic year, the Apprenticeship changed format and approached that of the "dual system". Thus, from now on, the 1st year students only attend lectures and workshops in the Apprenticeship centres. Subsequently the implementation of alternating training is planned, not with the morning/afternoon system any more, but with



4 or 3 days a week in college.

More specifically, the proportion of practical training is planned on the following scale:

50% in the 3rd semester

60% in the 4th semester

80% in the 5th semester and

100% in the 6th semester.

If the weekly framework interchange between the workplace and the lecture hall comes up against objections or operational difficulties on the part of the companies, then there is a consideration which could provide for this interchange to occur in more spaced out time intervals, for instance every few months.

There are 38 apprenticeship training units in total all over the country, which are distributed in 28 large and small towns. The number of specialisations offered varies from between 20 to 30. This variance reflects the swift and flexible adaptability of the OAED training programmes to the current changing job market situation, which is moreover the main sphere of activity of the organisation. In the 1983/84 scholastic year 23 branches operated, specifically:



- 1) Pottery
- 2) Silver and GoldSmithing
- 3) Graphic Arts
- 4) Hairdressing
- 5) Dressmaking
- 6) Watchmaking
- 7) Plumbing
- 8) Mechanical technician
- 9) Electrician
- 10) Car Mechanic
- 11) Car electrician
- 12) Electronics engineer

- 13) Internal combustion engineer
- 14) Chassis technician
- 15) Tool-making
- 16) Fitter
- 17) Carpenter
- 18) Welding
- 19) Draughtsman
- 20) Construction
- 21) Agricultural Machinery
  Technician
- 22) Refridgeration machinery Technician
- 23) Agricultural Cooperative personnel

The duration of the Apprenticeship is (except for 1 or 2 specialisations) 3 years. From the scholastic year 1984/85 only gradurtes of the 3-year Gymnasium, aged 15-18 years, have the right to enrol in the Apprenticeship programme, with the exception of the Graphic Arts department where the age ceiling is set at 23 years. The number of entrants each year, which fluctuates between 2500 and 3500 is derived from regional analyses of the job market distribution and is finalised on a borough level in May of each year. Enrolment of the students is carried out in October after careful selection, in which socioeconomic criteria play a major role, and a psychological test. The total number of young people follow-



ing the Apprenticeship programme has stabilised in recent years at around 10000. (44)

The OAED undertakes to find suitable practical training places for the students in companies who are to be found in the vicinity of the jurisdiction of each of the Apprenticeship centres. Employment in companies (in accordance with the more ancient form of apprenticeship) follows a 5-day week. Those young men and women who are under 18 years of age work one hour less than the established timetable. Remuneration for the students in practical training is set in the 1st semester at 50% and - on a sliding scale - reaches 100% of the lowest daily wage of an unskilled worker in the 6th semester, a sum which is as laid down in the annual collective agreements between the social partners. Throughout the Apprenticeship programme the students are covered by full medical and hospital insurance, the cost of which is covered initially by the OAED and subsequently the company, through the Greek National Health Service (IKA). (45)

In recent years the demand for training places on the Apprenticeship programme has risen dramatically, with the result that the demand:supply ratio in some skills reaches 10:1. This is clearly related to adverse developments in the job market and more specifically to the particularly high percentage of youth unemployment (see Chapter 1). The OAED's



daily contacts with the job market on the one hand and the Apprenticeship's close liaison with practical vocational training on the other have greatly increased the prestige and attractiveness of this type of training amongst the young. Thus, Apprenticeship graduates are quickly absorbed into the job market, very frequently being employed by the same company where they had earlier - during their course - carried out their practical training. Internal OAED research has shown that only 10% of graduates exercise a different profession than that in which they had specialised.

As was mentioned above, the Apprenticeship even with certain restrictions - is training of an . atypical nature. And this because, although the entrance requirement is the possession of a Gymnasium graduation certificate, as is the usual qualification, the Apprenticeship certificate does not confer upon its possessor the possibility of reentering the established education system at a level significantly higher than that (which they already had) at the end of the obligatory Gymnasium education period. Thus, should they reenter the 2nd year of the TEL (after competitive examinations), it means consequently an actual loss of at least 2 years. With regard to the possibility of their enrolment in the 1st year of the TES, this they would be able to do immediately after the Gymnasium without losing (in theory but not in essence) 3 whole years in apprenticeship.

Apart from these various (diminished) opportunities for the normal educational development of Apprenticeship students in comparison with those of the TES and the TEL, the following must also be noted; in many of the training programmes (skills) offered by the two major Greek vocational training bodies, the YPEPF and the OAED, an overlap can be observed, at least in the names of the specialisations. If one adds to this the lack of official professional recognition in most cases, then it is worth asking oneself, what are the differences for instance between an Apprenticeship electronics graduate and one from the TES or the TEL. In a country where there are undoubted qualitative and quantitative deficiencies in the area of vocational training, this situation could be described as a "waste" of educational resources, when moreover, there is no coordination and mutual productive exchange of information/experiences between the parallel activities and programmes, in order that one may be improved using the other's results.

#### 3.3. Career Planning

A significant (but not yet adequately developed) precondition for attracting a (slowly) increasing number of students to the vocational training sector, is the creation and continuous monitoring of an up-to-date and efficient technical and vocational training system with the ability to fulfil the country's broad socio-economic needs.



At the same time it is necessary to promote a systematic policy of intensive information dissemination, so that public opinion, and in particular the young, can obtain a complete picture of the content, the methods, the objectives and the prospects of vocational training as well as subsequent employment. Career planning and career counselling play a decisive role here. The Ministry of Education as well as the OAED have recently made noteworthy endeavours in this area. (46)

3.3.1. In the area under the jurisdiction of the Ministry of Education i.e. schools, career planning (up to 1981) took up only one hour a week in the 3rd year of Gymnasium. This "lesson" was given by lecturers of all subjects, who had previously followed a 3-day seminar. From 1982 onwards, these seminars were considerably increased, while at the same time a group of lecturers also went abroad for further training. Since 1983, career planning seminars last 5 months and have the following structure: in the first 4 months, various subject cycles of the Scholastic Career Planning Programme (SEP) are dealt with theoretically such as e.g. pedagogy, economics, psychology, basic knowledge of the job market etc. Subsequently, and for one month, the knowledge which the lecturers acquired during the seminar is practically applied. This includes discussions between students and lecturers, formation of working groups of the students in order to study the local job market, visits to places of work, renewed discussions between



students and lecturers to evaluate the experiences gained and finally exercises, with the objective of helping the students decide in favour of a particular profession.

It is worth noting as a particularly important innovation, that, since 1982, the SEP now services all the Gymnasium classes, 1st and 2nd year of the General Lykeion as well as the 1st year of the Technical and Vocational Lykeion. SEP lecturers with this responsibility now use detailed programme analyses with "Study Guides" both for Gymnasium and Lykeion students, with an extensive "Career Guide" and a volume on "Evaluation and Prospects for Employment in Greece."

Alongside that of the SEP, there is also an empirical follow-up study in the form of a question-naire, which students, parents and lecturers fill in. The results derived from the questionnaire are taken into consideration in efforts to improve the SEP.

One of the YPEPF's main principles regarding the SEP is to always respect the student's personality and free will, as well as to help him, after acquiring self-knowledge, to decide his professional future for himself.

3.3.2. Career planning, which is exclusively run by the Ministry of Education certainly cannot reach



all the young people at the "crucial age for decision-making", between 13 and 17 years, because - as can be seen from student movements examined in Section 3.1. - there are still some youngsters who leave shoool before completing the compulsory 9-year education period and ir addition, many more leave after the Gymnasium.

All these young people should not under any circumstances be left without any career planning advice. For this reason, the Employment Ministry has lately initiated a programme called "active career planning" based on Law No. 1346/83, offered under the auspices of the OAED.

This law provides for career planning programmes for young people between 15 and 18 years old, who have at least finished Demotico (primary school). The course duration is 200 hours overall, in a 10-week time period. It was begun experimentally in 1983 but the programmes quickly expanded into all the OAED training units, with the result that around 3500 students participated in 1984.

The procedure followed in the active career planning programme is as follows: under the supervision and with the help of career advisors and lecturers, the youngsters first visit workplaces in order to get to know the various demands and idiosyncracies of each job. After this, they collect information on training options for the professions in which they are interested, as well as the eventual employment pros-



pects. Lastly, they can choose the profession which they judge to be most suitable according to their skills and knowledge.

Finally, it is worth noting that an OAED Experimental Career Planning Centre which has 3 departments, has been operating in Athens since 1978. The first department provides information to interested youngsters; material in special files, broken down by degree of skill and education, documentation on jobs, transparencies and to a lesser extent, videocassettes. The second department offers career planning counsel with sincially-trained professors and OAED staff, not with the now outdated directional career planning method but based on contemporary counselling techniques, either in groups or on an individual basis. The Centre's third department offers its services to help Gymnasium and Lykeion students principally, in finding employment.

# 3.4. Post-Lykeion Vocational Training

#### 3.4.1. General

A synopsis of the vocational training options provided by institutions in the tertiary sector will be discussed in this sub-section. Besides the Institutes of Higher Education (AEI), whose activity focusses on the general progression of science, pedagogical and other academies will be excluded from the following discussion, not only because these come



under the title of general education, but also because they are gradually being brought into the AEI due to their completely specialised and idiosyncratic nature - this includes the military schools of Evelpidou and Naval Cadets of Ikarus. The remainder are schools which come under the supervision of either the Ministry of Education, with the Technical Educational Institutions (the TEI, which replaced the KATEE - Centres for Higher Technical and Vocational Education), the Ministry of Mercantile Marine with the ADSEN - Higher Public Schools of the Merchant Navy, the State Department with Higher Education in the STE's - Councils for Technical Education or the Ministry of Health and Welfare with its corre ponding Higher Education or, finally, the Transport and Communications Ministry which supervises two non-profit organisations (the OTE - telephone and telecommunications and the ELTA - Post Office), under which two Higher Education Schools operate.

#### 3.4.2. The Ministry of Education

いてきないのです。このできるというできないできるというできるというできるとはいっというとは、おきないないないできるできないできるというできない。

The Ministry of Education's role in the area of post-Lykeion vocational training with the Technical Education Institutions (TEI) which replaced the KATEE, is decisive. Unfortunately delays and omissions in information from the National Statistical Service (ESYE) allow only a few facts to be presented. Thus, according to recent and unpublished figures, which are only available for 1981/82 and 1982/83 in this breakdown, show the following picture on the one

hand of the number of students in the 1st semester, and all semesters on the other:

# TABLE 21 Total number of registered students in tertiary vocational training

SEME	STER/COLLEGE	YEAR			
		1981/82	1982/83		
In the	he 1st Semester		· -		
In the	he TEI +	6227	14570		
In the	he other Colleges ++	1580	2325		
In a	ll S esters				
In th	he TEI	23361	27421		
In th	he other Colleges	6604	6190		

- Includes the SELETE School of Technical and
   Vocational training Officers
- ++ Includes Ecclesiastical colleges

Source: YPEPF Statistical Service (unpublished figures)

From the above figures the fast growth of the number of registered students in the 1st semester in the time period shown, can be seen straight away, + 134% in the TEI, while the corresponding growth in the other colleges was much smaller: + 47%. Equally, the proportion of the TEI students as a percentage of total students in tertiary level vocational training with regard to the 1st semester, rose from 79.8% to 86.2% and from 78% to 81.6% with regard to all semes-

ters. In addition, based on the figures in Table 20 which refers to the number of entrants into tertiary education, it can be seen that the importance of these institutions - with regard to the total number of students in this sector overall - is growing all the time; from 35.3% in 1981 to 43.9% in 1984.

This is not the right place to expound the reasons which led to the 1983 reform, i.e. the replacement of the KATEE by the TEI (47). Very briefly, the main reasons which fuelled intense debates in parliament and in public opinion - particularly just after the fall of the dictatorship - were the basic qualitative weaknesses of the teaching personnel and the curriculae, supervisory and Laboratory deficiencies, grave deficiencies in administrative accuracy as well as non-existent, to nationally unacceptable financing procedures. The aim of the debates were to determine the objectives and direction of possible reform. Finally, the government elected in 1981, passed law no: 1404. 3 with which it aimed and continues to aim to regrade further education and make it more adapted to the current, specialised socio-economic needs of the country - through multiple organisational and operational adjustments.

Nowadays, the TEI indisputably dominate the area of post-Lykeion vocational training, properly placed within the tertiary education sector, on an equal level with universities and polytechnics. The



TEI however have a different mission and orientation from the latter two institutions. More particularly, they aim to provide their students with such theoretical and practical training which will enable them to apply any scientific, technological, artistic or other knowledge or abilities to the profession. In this way, it is hoped that they will be able to transform all the latest technological advances into a productive force towards a self-regenerating and fully integrated development of the country, and regionally in particular, according to its current specific socioeconomic needs. In other words, a conscious political choice with special emphasis on applied research, a trend which has been observed in recent years on the international front also.

Contrary to the previous KATEE centres, in which the Ministry of Education responsible had the power of direct intervention in their management (48) the TEI are organised on academic guidelines - according to the letter and spirit of Law 1404/83, with the main characteristics of: academic freedom and asylum, self-government, democratic structure and operation with the participation of all groups (lecturers, governors and students) in the decision-making bodies of those institutions, in an attempt to update and upgrade the studies.

The TEI are grouped into colleges, departments, student groups and affiliations. 1984/85 programming

如果我们就是我们的人,也可以不是一个人的人,我们就是一个人的人,也不是一个人的人,也是一个人的人的人,也是一个人的人的人,也是一个人的人的人,也是一个人的人的人



provided for 6 colleges with a total of 53 departments, of which 44 are already in operation while the remaining 9 are scheduled to commence operation in the 1985/86 academic year, as can be seen from the following table  $(50)_{22}$ :

#### TABLE 22

# Schools and Specialised Departments operating within the TEI (Academic Year 1984/85)

# A. SCHOOLS OF GRAPHIC ARTS AND FINE ART STUDIES :

- 1. Graphic artist
- 2. Interior decorator
- 3. Technology of Graphic Arts
- 4. Restoration of archeological objects and works of art \*
- 5. Photography

# B. SCHOOLS OF MANAGEMENT AND ECONOMICS

- 1. Business management
- Commerce and advertising
- 3. Accounting
  - a) tax accounting
  - b) cost accounting
- 4. Tourist Industry
  - a) Travel Agency
  - b) Hotel management

- 5. Librarianship
  - a) General librarianship
  - b) Library documentation - automation
- 6. Cooperative organisation and management +
- 7. Health and welfare service management +

# C. SCHOOLS OF HEALTH AND WELFARE PROFESSIONS

- 1. Public hygiene
- 2. Nursing
- 3. Obstetrics
- 4. Optician
- 5. Dental technician
- 6. Radiology X-ray
- 7. Medical laboratories

- 8. Beautician
- 9. Physiotherapy
- 10. Baby creches and
  - kindergartens
- 11. Social working
- 12. Health visitors
- 13. Work therapy
- 14. Hospital administra-

# D. SCHOOL OF APPLIED TECHNOLOGY

- 1. Civil construction engineers
  - a) supply organisations
  - b) labour organisations
- 2. Information Technology
- 3. Electronic data processing systems
- 4. Electrology
- 5. Electronics
- 6. Mechanical engineering
- 7. Topography
- 8. Ship building
- 9. Car mechanics
- 10. Oil technology
- 11. Spinning
- 12. Medical instrument technology \*
- 13. Public buildings construction +
- 14. Automation +
- 15. Energy technology \*
  - a) Energy

- b) Air conditioning
- 16. Mechanical engineering: construction, installation and production

#### E. SCHOOL OF FOOD TECHNOLOGY

- Food technology
   (plant and animal products)
- 2. Wine and spirits technology
- 3. Dietology +

#### F. SCHOOL OF AGRICULTURE

- 1. Plant production
- 2. Animal production
- 3. Agricultural management
- 4. Forestry

- 5. Gaming
- S. Agricultural machinnery - irrigation
- 7. Fish farming and fishing
- 8. Hothouses and floristry
- These departments will commence operation from the 1935/86 academic year.
- departments (specialisations) are today in operation (or will be) all over the country. These departments are unevenly distributed in the various TEI and their affiliates, always using the criterion of the particular needs (either real or estimated) of the area surrounding each educational unit (e.g. fish farming and fishing is only taught in Messolonghi where the well-known lagoon is situated.)

TEI entrance requirements are a pass in the general entrance examinations, although a small percentage (around 10%) gain access due to the favourable conditions for locals through regrading, transfers etc.

Basic TEI studies last for 6 to 8 semesters, according to each specialisation, of which 8 months are set aside for obligatory practical training in the chosen profession. This practical training period is programmed, carried out under real employment conditions and under the supervision and direction of the department which aims to consolidate the theoretical knowledge absorbed during the study course. this way, the student is totally informed and ready to bring marketable skills to the position in which he will be employed. During the practical training period the student is paid a salary. Finally, apart from the basic TEI studies, 10 month Specialisation programmes are also organised as well as further education courses and special departments for working students.

いいこと はいこう いっとうかん からしょう 大変なななななななない このを書いてきなる 大変なる あっちょうし

Throughout the TEI course the youngsters are covered by full medical and hospital insurance. They also enjoy other benefits (such as public transport discounts, free food and board in several TEI, free supply of text books).

Prospects for TEI graduates' professional

and social establishment are judged to be very positive, if one also bears in mind the general trends on the Greek job market which have recently begun to take shape. Nevertheless, the establishment of the students' legal rights in their profession, which has yet to be achieved, will play a decisive role here.

It is also to be noted that all tertiary level vocational schools under the jurisdiction of the YPEPF now belong to the State.

Alongside the TEI, the SELETE, School for Teachers of Technical and Vocational Training, also operates, which is an autonomous tertiary educational institution, under the Education Ministry's supervision, which aims at the pedagogical training, further education and refresher training of individuals who are either already working or will be working as supervisory, teaching or workshop staff during technical-vocational training. (Law No. 576/77). The SELETE which is based in Athens and has a subsidiary in Salonica includes:

一人一樣一一一人以為我的學不是人也可以我們是我們看你一個人不知道我們就不是我們我們也可以不知道我人一個一一人

- a) the Pedagogical Technical School (PATES) with departments for university, further education or middle school graduates, for a course of 6 or 12 months.
- b) Upper School of Teachers for Mechanical Engineering Technology (ASETEN), with departments specialising in Technologians of Civil Engineering, Mechanical Engineering, Electrical Engineering

and Electronics.

c) The Experimental Schools of KETE; Technical training centres, with a technical and a vocational Lykeion, and an advanced type Technical school.

#### 3.4.3. The Ministry of Mercantile Marine

The higher public schools of the Merchant Navy (ADSEN) whose importance to the shipping sector is significantly bigger than that of the Merchant Navy's Lykeion for Officer Cadets (see Chapter 3.2.5.) are subject to the supervision of this sistry. These schools offer the same skills as a previously referred to for the Lykeions, i.e.:

- Merchant Navy Captain
- Merchant Navy Mechanical Engineer

· • :

- Merchant Navy Radiotelegrapher.

The course duration is 3 years for all specialisations. Entrance requirements to the ADSEN are: Lykeion graduates aged up to 21 years, upon application and a selection process which is based on their final graduation grades. Graduates from these schools after a considerably reduced service period at sea compared to that of Lykeion students (see 3.2.5.) - can follow a similar career path to that of the Lykeion graduates, since they will have similar qualifications. (52)

The oldest ADSEN was founded in 1956, while

the total number of all ADSEN graduates up to 1982 came to 6738 in Captaincy, 3728 in Mechanical Engineering for Shipping and 2459 from the Radiotelegraphy department.

As is the case for the Merchant Navy Officer Cadet Lykeions, so also here, the number of enrolments published by the Ministry has shown a decreasing trend in recent years. Specifically, while in 1981/82 enrolments in the 3 specialisations were 510, 265 and 270 students respectively, in 1984/85 these were 208, 317 and 119, a situation which reflects the shipping industry's crisis, which has been previously discussed. At the same time the total number of students dropped from 2609 to 1607.

#### 3.4.4. The Ministry of Health and Welfare

Tertiary education under this Ministry's Supervision is given in the following institutions (53):

- Eight (8) Upper Schools of Nursing Sisters of which 4 are State and 4 are privately-run, each with a 3-year course.
- Three (3) Higher Schools of Health Visitors of which 2 are State-run and 1 is privately-run, each with a 4-year course.
- Three (3) Higher Schools of Obstetrics of which two (2) are State-run and one (1) is privately-run, each with a 3-year course.
- One (1) Higher School of Physiotherapy which is State-run and has a 3 year course.

### 3.4.5. The Ministry of State

Through the Greek Tourist Board (EOT) and its related Schools for Tourist Professions (STE), this ministry is responsible for providing Higher Tourist industry vocational training. (54) A 2-year higher training course is provided in the college of Rhodes (previously in Kifissia also) with the aim of training hotel staff who will later have the potential to take over managerial positions. Around 1400 individuals graduated from this school during the period 1956 to 1983, while in recent years around 70 enrol each year.

As is the case for the Schools under the Health and Welfare Ministry, Higher STE training will very soon also come under the umbrella of the Ministry of Education (YPEPF), through the TEI School of Management and Economics.

# 3.4.6. The Ministry of Transport and Communications

A Higher Technical School of the Greek Telecommunications Organisation (OTE) which is allocated to the above Ministry is operating in Athens, and has the following 4 departments:

- a) Management
- b) Technical
- c) Economics
- d) Training department for Staff and qualified Engineers.

OTE employees with the minimum qualifications of a 6-year Gymnasium graduation certificate, a successful 6-year period of service and aged up to 40 years can enter this school after entrance examinations. Here, general theoretical and vocational training is provided, as well as opportunities for practical applications (at work etc.).

In departments a) and b) the course lasts 4 semesters, in c) 3 semesters. Department d) provides evolving programmes, changing course durations etc. to suit the organisation's service requirements at the current time.

The training provided by the OTE's Higher Technical School (ATSOTE) is atypical, i.e. the graduates receive vocational training and employment only within the Organisation's framework.



#### 4. FURTHER EDUCATION

#### 4.1 General

八人不是一个然外不不不在在在一个一个一个人的人的人

Further education as well as post-graduate education of the population and of the labour force in particular takes on a different significance in each country because it usually complements or operates alongside the current mainstream education system at the time (whether this is general or technical-vocational). Based on this, one can formulate a jorking hypothesis - albeit a general and rather sketchy one:

- a) On the one hand there are countries with a well developed education system both from the qualitative and quantitative viewpoint where further education mainly takes on the role of "adapting" peoples' know ledge and skills each time to the current socio-economic developments, while at the same time covering a large part of the so-called "social demand" for education.
- b) On the other hand, there are countries with visible weaknesses and deficiencies in the general education system and even more so in the technical and vocational area, where further education of necessity takes on the additional as well as difficult role of an unofficial "substitute," providing knowledge after the event which should really have been covered through the normal, basic education system.

These observations are worth noting for the reader since they will help him to better understand the situation in Greece in the test which follows, if he accepts that

this country, in broad terms, falls into the second of the above categories. This of course means that various conclusions can also be made as to whether and to what degree further education in Greece adequately fulfils the role of a "substitute" for the deficiencies of the normal education system.

One criterion which could be used to judge the various further education activities which are developing in this country could be - in very broad terms - the degree to which they match the job market situation. With this criterion one can identify 2 groups:

- i) Those activities which are more or less oriented towards the conditions of the job market
- ii) Those which indirectly or at a different time could someday influence an individual's position on the job market.

#### 4.2. Further education oriented towards the job market

This is the area where the most significant new further education measures will soon become visible, whose justification and objectives stem from the short-term requirements of the job market. First of all, it is worth mentioning the OAED, one of whose basic aims is the best-possible employment of the work force in the most suitable jobs, subject to the current job market requirements. The OAED programmes are as follows:

4.2.1. Intensive Vocational Training is aimed mainly at the unskilled unemployed, but also to the employed



who wish to obtain a skill which is pertinent to their professional advancement and/or facilitates their absorption into the local job market. Individuals from 18 to 46 years old are eligible for enrolment (although in practice this happens up to the age of 27). The intensive training, which lasts for between 6 to 9 months is provided in the KETEK (Centres of Technical and Vocational Training, formerly called the KEKATE - Vocational Training Centres for Adults and KTEED). More than 20 courses are offered, from Fitter and Oil-Painter, to Carpenter and Hairdresser.

- 4.2.2. Intra-Business Schools are established within large companies upon their application and are operated under the management and direction of the OAED. The Organisation also prepares the students, some of whom come from the companies themselves, with special teaching seminars, while it is also responsible for paying and insuring the students. These schools aspire to the fast training of unskilled workers in skills which not only directly interest the companies, but also the wider community area.
- 4.2.3. Mobile Training Units. The OAED has 3 of these units nationally, which it uses according to the needs of Technical and Vocational Training for Adults in non-industrial areas, where there are no possibilities at all for any training or education.



### 4.2.4. The Agricultural Technology General Educa-Programme

Agriculture is and will remain a particularly important factor in the Greek economy's development for a long time to come. As we previously saw (see Chapter 2) however, if one excludes tertiary education for agriculturists, veterinarians and some agricultural cooperative staffing personnel, the overwhelming majority of those employed in this sector are not in possession of any specialised vocational training. For this reason, the Ministry of Agriculture, its subsidiary organisations (the ATE - Agricultural Bank of Greece, the ASEO etc.) and the agricultural cooperatives are making strong endeavours in the area of exoscholastic agricultural training, further education and information, so that farmers can update their methods, increase their income and raise their status and standard of living. (56)

The cornerstones in the implementation of these training programmes which are outside the normal education system are the 48 Schools of Agricultural Training (KEGE) where, in 1982, a total of 33000 agricultural workers underwent training. 24 subjects are covered which are structured in the following way:

- a) Techniques, economics, management, cooperatives etc., from 1 to 30 days
- b) Agricultural domestic economy for the female agricultural worker (diet, clothing, housekeeping,



rural tourism etc.) up to 40 days

c) Topics of educational, political, social, general or local interest for the population in the KEGE's area.

The training, food and board of the participating agricultural workers are free. Those who are following programmes which last more than 100 hours also receive daily compensation.

- 4.2.5. The Tourist Sector occupies an increasingly important position in the country's economic development. A basic prerequisite for qualitative advances in and the expansion of tourist activities is, among others, the existence of a large and suitably skilled work force. This cannot be achieved however solely by the basic and higher training programmes which the Greek Tourist Board (EOT) offers and which were discussed in the previous chapter. Thus, the EOT offers 2 more programmes in this sector, which are also categorised as further education, under the following definition: (57)
- a) The Further Education Programmes at the STE (Schools for the Tourist Profession) which include hotel, restaurant and catering departments and which aspire to the perfection and systematisation of professional knowledge. Individuals with proof of employment in this sector, or those who are short-term unemployed (i.e.  $6\frac{1}{2}$  months maximum) can participate up to a maximum level of 20% of the student total in



each department. Other entrance requirements are a Demotico graduation certificate and not to be over 55 years old.

The programmes are  $5\frac{1}{2}$  months (from mid-October to end of March each year) or  $3\frac{1}{2}$  months for individuals who speak a foreign language or have more than 12 years' related professional experience. 6 subjects are taught in each department, from 2 to 4 hours a day, in a 5-day week.

- b) Intensive Training for Junior Hotel Staff. The programme is organised through the EOT and the OAED through the winter months in various towns and lasts 2 months, with a 6-hour per day teaching programme. Its aim is to provide basic knowledge and skills of hotel and restaurant techniques to unskilled personnel, but also to contribute to raising "tourist consciousness." Demotico graduates aged between 16 to 45 years can enrol.
- 4.2.6. Industrial and Professional Further Education for Workers is provided and organised by the "Association of Businesses" and is non-profit making. This Association was set up by 12 large Greek companies and aspires to:
- a) create and improve the skills of technicians and foremen in order to improve productivity
- b) keep up to date with technological developments in Greece and abroad



- c) help middle level personnel advance and acquire multiple skills
- d) the social advancement of business operatives (58)

To this purpose, the Association has established an Auult or Further Education Centre in the Acharnon area of Attiki. The lecturers are mechanical engineers and group foremen of long experience (more than 15 years) in industry and in the teaching of adults. The programmes which are selected and drawn up according to the needs and requirements of industry can be implemented in the Centre as well as in the place of business itself, as long as enough students can be gathered together. The length of the course can vary from 200 hours and above (for the regular programmes), less than 200 hours (for combined regular programmes) and 40-20 hours (for extra programmes).

- 4.2.7. Other further education programmes are undertaken by various organisations which are either government-controlled, or controlled by trade unions, professional organisations, as well as by companies.

  (59) Specifically:
- a) The ELKEPA (Greek Centre of Productivity) provides specialised further education programmes for higher and middle level company personnel. The individuals who participate are mainly graduates of tertiary and even university institutions, followed by middle-level education graduates. According to their



employment situation, the students are either young unemployed or selected company personnel, who are there to update and/or acquire specialised knowledge. The programmes are short in length (20 to 50 hours) or longer (100 to 800 hours). They are carried out either in the ELKEPA's local subsidiaries or within the interested companies and refer to subjects which are not covered by university or other post-graduate courses (e.g. management, marketing, tax-accounting, labour relations etc.).

- Medium-sized Manufacturing and Handicraft Businesses), with its further education programmes, aims to fulfil the needs for skilled labour in small to medium-sized businesses. Specifically, management and innovation seminars etc. are offered to small manufacturers while general handicraft, carpet-making, woodwork, weaving and ceramic art seminars are available to craftsmen. The length of the seminars is short (24 to 75 hours) or long (3 years for carpet-making and woodwork). The programmes are carried out in the EOMMEH workshops, while the teaching staff consists of Association personnel or specialised Greek or foreign speakers.
- ment) is a non-profit making body which aims to "study, advance and promote the principles and practice of modern management to Greek business and organ-



isations." To this purpose, it provides, among others:

- i) Further education programme options, with one basic long-term programme and various short-term seminars. The subjects cover General Management, information systems, electronic data processing etc. The seminars are carried out in the EEDE's offices in Athens and Salonica.
- ii) Intra-Company Seminars to fulful special requirements of businesses and organisations. All the seminars are in the main for higher level personnel of businesses, organisations, gradules i.e. of tertiary mainly university level education, while very recently some seminars for foremen have been carried out, i.e. graduates of middle level education.
- d) The two largest Greek Trade Unions, the GSEE (the (General Federation of Greek Workers) and the PASEGES (National Federation of Agricultural Cooperatives) also organise further education programmes for trade union staff or for agricultural cooperative staff. In relation to the GSEE, the KEMETE (Research and Documentation Centre) should also be mentioned, which organises and supervises seminars and WORKSHOPS on a national, regional and local level on subjects of vocational specialisation and labour relations as well as short-term usually weekly f rther education for trade union staff in economics, industrial, managerial and work-related subjects.



The PASEGES on its part, with the further education it provides in the Cooperative School of Salonica as well as in other less-developed agricultural areas, attempts to create capable and skilled personnel for agricultural cooperatives. The programmes are short-term (2 to 3 months) and can - in some cases - be carried out on the business premises.

- e) Finally, it is worth mentioning the following organisations as further education bodies who offer specialised programmes according to their current needs:
- the Greek Technical Chamber of Commerce
- the Greek Agriculture Technology Chamber of Commerce
- the Greek Association of Business Research
- the Greek Mathematic Association and
- the Greek Institution of Statistics

Glancing back at all the preceding further education programmes it can be seen that they are mainly aimed at upper level personnel of businesses and organisations, i.e. to graduates of tertiary - and university - level education. This, if anything, is an indication of the quality of Greek university education, since it continues to be - apart from a very few exceptions - unspecialised, out of date and/or out of touch with the country's current needs

Finally, it is worth noting that all the



above-mentioned institutions, including the further education organisations take full advantage of opportunities for financing from the European Community Fund (see details in Chapter 7).

# 4.3. Further Education Programmes of the General Secretariat for Adult Education

As was previously discussed, these programmes have an indirect (positive) influence not only on the individual's position on the job market but also on his integration into more general social activities. It must be said however, that Adult Education is currently going through a transition period characterised by a lack of direction both regarding its content and its organisational structure. Thus, any speculation as to the future course of this institution today, based on earlier experiences, would be a prejudiced operation.

According to existing legislation, "Adult Education" in Greece is any type of organised education outside of the scholastic system, which aims to help each individual develop their own personality freely, independently of educational level, age and sex, as well as their active contribution in the social, economic and political life of the area. (60)

More specifically, based on recent declarations, Adult Education desires to contribute to the promotion of the following complementary objectives:



- Vocational training; according to legally-set priorities and after careful investigation of each area's development needs.
- Support of the principles of citizen participation (cooperatives, companies run by workers, community projects etc.) in order to promote self-government and to develop the citizen's community.
- Discussion, information and effective interpersonal relations on important subjects, in order that each individual can develop "social-consciousness" and can participate in decisions which concern him.
- Community activities in order to creatively exploit leisure time and at the same time to help the region develop its own community counsel.

With regard to vocational training - and in order to avoid any possible misconstruals on this phrase - the principals do not intend the worker to adapt to the requirements of his job in production but generally to develop his ability to determine the course of his work. (61) From this position, it is acceptable to channel Adult Education into activities which have an indirect and long-term relationship to the current situation on the job market.

Concerning the various social problems, Adult Education concentrates on subjects such as: illiteracy, women in employment, experimental programmes for the social rehabilitation of convicts, educational programmes for gypsies etc.



NUMBER OF STUDENTS, DEPARTMENTS AND HOURS OF FURTHER EDUCATION

# BY YEAR ANL REGICN

PEGTON	DEPARTMENTS				HOURS STUDENTS OF FURTHER EDUCATION			R EDUCATION	
REGION	1982	1983	1984 <sup>(1</sup>	st em.) 1982	198 3	1984 <sup>(1s</sup>	st m.) 1982	1983	1984 (1st
RURAL	4.733	6.755 51%	4.239	304.148 31%	473.803 48,2%	316.870 42%	70.594 26,6%	100.019	63.050
SEMI RURAL	6.268	3.107	2.096	389.527	229.698	177.190 27,5%	103.253 39%	47.926	32.115 22,5%
URBAN	5.397	3.374 25,5%	3.013	293.169	280.500	261.55 34,5%	91.720	49.926	47.421
TOTAL	16.398 100%	13.236	9.348	986.844	98 <b>4.</b> 001	755.616 100%	265.567 100%	197.896	142.586



In the previous Table 23, the activities of the Adult Education system in the period 1982 to the 1st semester of 1984 are illustrated. The short time period being analyysed, the transitory situation which the institution is currently undergoing and the availability of figures only up to the 1st semester of 1984 do not permit their comparison and evaluation through time. The following table shows the total number of students in the same time period, with six breakdowns:

	TABLE 24					
	Distributi	ion of	Students	by Yea	r and Sex	
	1982	%	1983	%	1984 (1st Sem- ester)	%
No. of Students						
Male	69081	26	62882	31.8	46373	32.5
Female	196486	74	135014	68.2	96213	67.5
Total	265567	100	197896	100	142586	100

Up to and including 1982 the departments were divided into 8 categories, using length of time period as a guideline: 12, 24, 48, 72, 108, 120, 144 and 215 hours. The most popular were programmes of 72 hours (representing 30.6% of total hours), 48 hours (23.0%) and 108 hours (14.3%). From 1983 onwards, after consultation with the European Social Fund which contributes to the financing of these programmes, all programmes of less than 72 hours in length were abolished.

With regard to the programme content, there are 6 div-



isions, shown in the following rable, together with the number of departments in each and their "specific weight" in the overall total.

TABLE 25
Distribution of Departments by year and by subject

	Divisions	1982	1983	1985 (1st sem- ester)
1.	Crafts and Handicrafts	3727 53%	6603 49.9%	4290 45.9%
	(of which the Dress- making department:		<b>,</b> , , , , , , , , , , , , , , , , , ,	
	and as a proportion of	6345	2497	1460
	the total)	72%	38%	34%
2.	Maintenance and develop-	725	1308	963
	ment of traditional professions	4.4%	9.9%	10.3%
3.	Animal and Fishing	85	724	486
	production training	5.2%	5.5%	5.2%
4.	Mechanical Engineering	849	701	449
	electrological and	5.2%	5.3%	4.8%
	construction skills			
5.	Business Personnel	4963	3226	2280
	Training	30.3%	24.3%	24.4%



6. Training of specific 284 674 878 social group skills, 1.7% 5.1% 9.4% subjects of social significance

TOTALS 16398 13236 9348

100%

100%

100%

The organisational structure of the Adult Education system exists at 3 levels:

- ariat of Adult Education (GGLE) attached to the Ministry of Culture. This central service lays down the main principles and guidelines of Adult Education according to the government's will, supervises the work being carried out down to decentralised levels, offers advice, works out the materials required for the programmes, pays attention to the technical foundation and other requirements needed for the programmes and finances the whole sphere of activity of the Adult Education System.
- on a regional level, with the Regional Boards for Adult Education (NELE), which are based in every Borough of the country. The NELE is a collective body, chaired by the Major and consisting of State representatives from social and mass organisations (chambers of commerce, cooperatives, trade unions, etc.), representatives of local decentralised administrations etc. The responsibilities of this Council are: to rule on the implementation of the Adult Education programmes within the

framework of the 5-year development programme and after verification of the relative need of each local area of the Borough, to rule on the establishment or abolition of Adult Education Centres (KLE) and finally, to approve the necessary funds required to implement these programmes.

Education Council (SLE) operates, it has 5 seats and is of advisory status. Specifically, it recommends the creation and development of Adult Education programmes and departments to the NELE board, as well as suggestions related to the employment of suitable lecturers.

iii) On a <u>local level</u>, with the <u>Adult Education</u>

<u>Centres</u> (KLE), which undertake to implement the various programmes, broken down into departments, according to locality requirements.



## 5. HISTORICAL DEVELOPMENT

In order to better understand the current situation in Greece of technical and vocational training, it is worthwhile, if not necessary, to take a brief historical look back in time. After the establishment of the new Greek State in the first half of the 19th Century an education system was developed, whose main elements — as a consequence of political and ideological circumstances — were the Classics and Humanitarian Studies. Despite the intense pressure over a long drawn out period arising from various socio-economic needs for the development of an up to date and productive vocational training system, the government was only able to arrive at an overall legislative reform of the subject in 1959 (Laws 3971 and 3973).

At that time, the compulsory 6-year education was in force, which covered up to the twelfth year of age and finished with the Demotico graduation certificate (primary school). Following this (or after a few years), young people had the following alternative options for their vocational training/education, if they did not wish to continue their general education in the 6-year Gymnasium and the later aim of entering university:

- They could enrol in the then-called "Lower Technical and Vocational Schools," with one-year to three-year courses, where they would be trained as skilled technicians.
- b) They could enter the Gymnasium initially up to the 3rd year and then enrol in the "Middle Technical and Vocational School," usually a three-year



course, with the aim of graduating from them as "foremen/work supervisors."

c; Finally, upon reaching their 14th year of age, they had the option of enrolling in the "Apprenticeship Schools" of the OAED, which were established in 1953 and which ided atypical vocational training, in accordance with the West-German "dual system". This is a form of combined education; alternating mornings at work with theoretical lessons in the afternoon and workshops at the Apprenticeship Centres.

It is nowadays an undisputed historical fact that during the initial years after the laws were voted, the responsible state authorities did not work productively in this sector, with the result that the economy's as well as society's general labour force requirements always remained unfulfilled on a broad as well as specialised level of vocational skills. The State vocational training programmes offered were not in a position to satisfy the smallest requirements from the point of view of quality, depth or variety. Thus, vocational education was unable to develop and augment in order that in time it could become an alternative solution equivalent to general education. these weaknesses, and with no flexible horizontal outlets into general education, vocational education ended up operating as an "emergency exit" for all those youths who - due to various circumstances - dropped out early from the path towards post-Jymnasium-University education. At the same time a process of social discrimination began to operate, in the sense that young people from "upper" social



strata represented a significantly higher percentage of students in the general education Gymnasiums (and afterwards in the Universities) proportionate to their percentage of total population, while the opposite occurred with students from the "lower" social strata in the technical and vocational training schools.

The figures below clearly illustrate the qualitative differences which were already beginning to manifest themselves:

TABLE 26
Distribution of Students in Secondary Education

Vocational Training of all types	Gymnasium	Total	Relationship (1): (3)
(1)	(2)	(3)	(4)
112311	477745	590056	19.0%
123081	490867	613948	20.0%
133361	504031	637392	20.9%
134117	<b>5</b> 19347	653404	20.5%
132591	547016	679607	19.5%
131521	562635	694216	18.9%
	Training of all types (1) 112311 123081 133361 134117 132591	Training of all types Gymnasium (1) (2) 112311 477745 123081 490867 133361 504031 134117 519347 132591 547016	Training of all types       Gymnasium       Total         (1)       (2)       (3)         112311       477745       590056         123081       490867       613948         133361       504031       637392         134117       519347       653404         132591       547016       679607

Despite the fact that these figures remain "static" and do not express student rovements broken down into age groups - resulting in a diminished degree of accuracy - it is nevertheless clearly seen that the Greek system of technical and vocational training was not yet in a position to attract and/or train more than 20% of secondary education students - even after the end of its "teething years."

After a careful evaluation of the situation, it bears the



hypothesis that amongst the main reasons for the decreasing trend in students of technical-vocational training after 1974/5 was the full revelation and intense public debate - in the liberal climate after the political reform - of the multiple weaknesses in this area of education as well as the continual postponements in implementing new extremely urgently required reforms, matters which induced a feeling of great insecurity in students and parents alike.

At this point it is necessary to refer to the role played by private enterprise in this situation. Given the inefficiency of the state services in developing a productive system of technical-vocational education, private enterprise - with the law explicitly supporting it - has decisively intervened in this sector, attempting to satisfy the job market's continuously clamouring demand for a skilled labour force. Thus, privately-run technical and vocational schools mushroomed at a very fast rate so that by the end of the 60's decade they had assumed a dominating position, as the following paragraphs will show. ever these institutions, mainly run by people whose principle aim is to make profit, could not create the image (apart from a very few exceptions) of an attractive alternative to general secondary education, either from the point of view of equipment, programme content or variety of programmes. This now created a deep-rooted negative image in public opinion about "the new movement" of technical-vocational education.

All this, combined with the traditional deep-rooted



popular perception that intellectual work (and academic studies) ensure better social recognition and economic ease than manual labour (and vocational training), naturally did nothing to attract a larger number of students to this education sector. The development of the role of private vocational training through time can be seen in the following table:

TABLE 27
Students in Higher Vocational Education

Scholastic Year	Total Students	of which	State % Schools	Privat Schoo	te %
1970/71	93807		22961 (24.	0) 7048	(75.4)
1971/72	112311		44114 (39.	3) 68197	(60.7)
19/2/73	123081		51388 (41.	8) 71693	(58.2)
1973/74	133361		61167 (45.	9) 72194	(54.1)
1974/75	134117		67590 (50.	4) 66527	(49.6)
1975/76	135591		71848 (54.	2) 60743	(45.8)
1976/77	131521		82243 (62.	5) 49278	(37.5)

These figures show the decisive role of private vocational education at the beginning of the 70's decade, but also their subsequent decreasing importance. This last development is not unconnected to the fact that, particularly after 1974 when the public opinion's accumulated dissatisfaction could now freely express itself, ideas for major changes in vocational training slowly but steadily began to mature in government chambers. Private vocational training schools, with the dominant position which they then enjoyed were attributed the responsibility for the major part of the sector's failure. They became the



scapegoats and their reduction or even abolition was demanded.

Governments which came to power after 1974 indirectly allowed it to be understood that they would deal with this demand - in one way or another. At this time, the private bodies began to increasingly curtail their activities, while at the same time the public sector gradually increased its participation, as can also be seen from the above table.

In only 7 years the State was transformed from a "supporting" to a "leading" role in technical and vocational training, with regard to the number of students. However, if one looks at higher level vocational training in its entirety, it then becomes evident that in this time period the State could not do anything more than filling the gaps that the private sector was leaving. But, for an administration which is known to be sluggish and unproductive, this is already a worthy achievement. Expecting real qualitative changes initiated from the public sector, coinciding with a period of growth would amount to fanciful illusion for such a state mechanism. The improvisations, deficincies and delays which marked progress in the implementation of the 1976/77 laws, confirm the truth of this statement.

At that time (1976/77) two reforms in the area of secondary-level education were carried out, aimed at creating significant structural, organisational and (indirec-



tly) certain qualitative reforms. Following the 1975 constitutional order (Article 16), according to which compulsory education should not be less than 9 years, the government established with Law No. 309/1976 - among others - the integrated compulsory 3-year Gymnasium, to follow on from the 6-year Demotico School. Apart from this a 3-year Lykeion was also created with a principally general education orientation (as the second cycle of secondary education).

With Law No. 576/1977 which followed Law No. 309 the following changes - among others - were instated:

- The "Lower Technical-Vocational Schools" were abolished and were replaced by the New Type TES "Technical and Vocational Schools," which have one or two year courses, and which are aimed at Gymnasium graduates.
- The "Middle Technical-Vocational Schools" were also abolished and these were replaced by the "Technical and Vocational Lykeions" (TEL), with three-year courses.

Thus, Gymnasium graduates now had the choice of either enrolling in the TES without examinations or to sit entrance examinations (which were abolished in 1982) for the General or Technical-Vocational Lykeion. Apart from this, they also had the option of entering the OAED Apprenticeship Schools.

The central "philosophy" of these Laws with regard to



student movements towards one of the two basic directions of "general/vocational training" mainly consists of a voluntary (on the part of the YPEPF) reforming intervention with the aim of chanelling an ever-increasing number of students towards vocational education, both medium and long-term through the selection mechanism (i.e. Lykeion entrance examinations). This would not of course eliminate the danger of the old situation returning when vocational-training - perpetuating the weaknesses - would again operate as a "selector of second-class students."

The time period from 1977 to 1982 is very short for making a documented evaluation of the results of the reform of the vocational education sector. From certain figures presented in Chapter 3, it was seen that the proportion of students in technical-vocational training in overall post-Gymnasium education recently reached - after slight fluctuations - around 26%, a percentage which is judged unsatisfactory when compared to international levels.

The future will show whether and to what degree the abolition of Lykeion entrance examinations in 1982, as a reforming mechanism on student movements, will contribute — in combination with other changes which are already well advanced — to erasing the mistrust of vocational education, to achieving full and credible equality versus general education, so that young people can consciously choose it with a clear perspective on their future. In the medium and long-term, such an unhurried but also painstaking sol-



ution is the only one which can bring about a gradual decrease in the student scramble to get past the university gates and provide a set of professional skills for the labour force which is better adapted to the country's current and future socio-economic needs.



## 6. THE AUTHORITIES

## 6.1 General

3

In the previous chapter it was seen how belatedly the Greek government created an overall legislative framework for technical-vocational education (not until 1959). This delay, combined with a longstanding demand - latent or apparent - for a skilled workforce not of university level, were the most significant reasons why other ministries - excluding the YPEPF - attempted individually, even before 1959, to fulfil such needs in their area of jurisdiction. These initiatives took the form of either establishing schools on behalf of the ministries or supervising similar private schools which already existed.

Thus, for example the Ministry of Social Services trained nurses, the Ministry of Mercantile Marine; Captains, while the Ministries of Industry and Employment shared responsibility (more or less) in the critical sector of technical education. With the 1959 laws, the incumbent government attempted to group the Administration and Supervision of technical-vocational education under the Eduçation Ministry's area of responsibility. In fact, this Ministry did manage to achieve the supervision of 77.6% of the total number of educational units up to 1964-65. (63) This was not matched however by a clear partition of the basic responsibilities of the remaining technical-vocational training bodies. On the contrary: increasing complaints were made about duplicated programmes which led to friction and/or uncoordinated parallel activities. There was a series of examples where 2 or more ministries were



carrying out similar or even identical training programmes without existing documented justification for these differentiations. Such a "waste" of resources in educational policy was even more unacceptable in a country such as Greece which has very limited budgets for technical-vocational training, particularly when these parallel activities were not consciously intended to be experimental "competitive" programmes aiming at later determining the most successful "model" in practice.

This situation has certainly much improved in recent years, but quite a few questions continue to remain unsolved such as for example the similarity - at least in title - of the OAED apprenticeship programmes with those of the YPEPF (see Chapter 3).

The distribution of responsibilities between various ministries in the technical-vocational training sector is shown in the following table (development with regard to student numbers). (64)

At the top, with a big lead, is the YPEPF whose percentage seems to be stabilising, after some fluctuation, at 85%. This is followed by the Ministry of Employment, which offers the apprenticeship programmes through the OAED. The remaining ministries come after, which are not only insignificant arithmetically but neither do they offer anything in the way of new ideas or innovations in their objectives, programme detail or pedagogical methodology in order to be of qualitative merit.



TABLE 28

Distribution of responsibilities by ministry, in the technical and vocational training sector

<u>(</u>	based on	number of	students)	
Scholastic Year	1972/3	1975/6	1978/9	1980/1
Ministry of	%	%	%	%
Education	86.9	90.6	87.3	85.6
Employment	9.4	7.1	8.0	10.5
Social Services	0.6	0.2	0.6	0.7
Agriculture	0.7	0.3	0.1	0.1
Mercantile Marin	e 1.1	1.0	3.2	2.0
Culture	•==	0.03	-	0.2
State Department	•	-	0.8	0.8
Other	1.3	0.8	-	0.1
Total	100	100	100	100

Discussions on transferring responsibilities for vocational training from other ministries to the YPEPF have been going on for some time. Attempts aimed at tieing in with each other and/or partly merging general and vocational education which are already being made at an international level could be referred to as the main argument for such a development. Enriching vocational education with more theoretical and general facts, i.e. expanding the knowledge base on the one hand and importing professional knowledge or skills or even incorporating whole vocational training programmes into the general education system on the ther, constitutes a task which could only be carried out by an Education Ministry in the form of integrated schools (such as the GESAMTSCHULEN or COMPREHENSIVE



SCHOOLS etc.). The question which still remains unanswered for the time being, is whether trends towards courageous experimentation and creative innovation will continue or whether this extension of the YPEPF's responsibilities will be abused and operated mainly as an excuse or method for expanding and securing privileges for teachers and degree holders, without noteworthy qualitative improvements. (65)

## 6.2 The decision-making mechanism

The structure with which decisions are sought and taken takes the following form in each of the two most significant technical-vocational training bodies in Greece:

- 6.2.1. In the <u>Ministry of Education</u> (66) there is a central service, with various toards, which has decision making responsibilities on a national scale. On a second, regional level, there is a "Vocational Training Bureau" in each area with two exceptions:
- a) in the area of the "ex-administration of the capital city" there are 4 departments which are divided according to geographical criteria.
- b) In the Salonica area there is also a "board" instead of a "bureau."

On important policy subjects in vocational training, for example establishing or closing down scholastic units. creating new or aboloshing old departments etc., the "bureaus" or the "boards" give counsel and make proposals which are initially approved by the "Regional Council" and are then sent to



the Education Ministry for final approval. The "Regional Council" is a committee on which, apart from the Mayor, representatives of the local administration, employers and workers as well as other public bodies participate, with the right to vote.

6.2.2. At the <u>OAED</u>, <sup>(67)</sup> which is responsible for the apprenticeship programme, the following structure exists; under the Central Administration in Athens, there are 7 Regional Boards, specifically for; Epirus. Salonica, Crete, Attiki and the Aegean Islands, Central and Western Macedonia and finally East Macedonia and Thrace. On a third, local level there are 51 Borough services, while in around 20 cities where there are concentrations of the labour force, a similar number of "Employment Bureaus" exist (which are on the same level of hierarchy with the borough services).

In all, there are 3 levels, the Central Administration Commissions, the regional boards and through them the educational units to investigate the conditions on local job markets - in collaboration with local worker centres, commercial and industrial chambers of commerce, local government and community councils - in order to come to conclusions about vocational training needs. Subsequently, and flowing from the opposite direction, the results of these investigations are shaped into proposals according to student numbers and skills in demand, which are submitted to the



Central Administration for approval. Here, all the facts are carefully examined and are laid before the OAED's 3-member Advisory Committee which initially decides. Finally, the head of the Organisation announces the result in detail, that is, which skills will be taught in which areas and how many students will be accepted annually in each new course.

## 6.3 The role of the social partners

Referring to the role of the social partners in formulating, implementing and continually updating political measures for vocational training, those which can be mentioned in Greece's case are - unfortunately - very few. The usually scholastic nature of vocational training is perhaps among the main reasons why employers have stayed away from the subject up to now - unless one excludes the voicing of certain general complaints and of some nebulous expectations. (68) Thus, it was not possible to unravel the whole network of problems in collective discussion and consequently up to the level of serious talks between the social partners. On the other side also, the trade unions being, until recently, only concerned with economic bargaining, were not seriously interested in vocational training, neither of course did they develop any strategy related to this subject.

Certain of the organisations previously mentioned, for example commercial-industrial chambers of commerce, local workers' centres and community councils do participate indirectly in formulating political measures for vocational



training without it being possible however to claim that the social partners take an active role in this sector. On the other hand, experience in various European Community member states clearly shows that lively and effective interpolations from both social partners are necessary prerequisites for a long-term successful policy of vocational training. For this reason, these deficiencies prevalent in Greece are unacceptable on all sides and must be overcome as swiftly as possible, particularly when the SEB as well as the GSEE have a wealth of successful and unsucessful international examples at their disposal, which could be very positively exploited, bearing in mind regional circumstances.



## 7. FINANCING

#### 7.1 General

Financing vocational training in Greece has not been the object of special discussion or serious concern in the past on the part of responsible authorities or specialised Advisors. Not until two years ago was a systematic and scientifically documented portrayal of the current situation carried out and this was within the framework of a research programme on the "Cost and Financing of Vocational Training in European Community Countries" (69) which was initiated and is being coordinated by the CEDEFOP. (70) The facts presented below come from the results of this research and particularly from the survey on fund-raising organisations and cash flows. (71)

## 7.2 The overall structure of financing

In 1984 the overall expenditure on public and private education of every type, both mainstream and atypical came to 46,700 million drachma of which 131,700 million (89.8%) where allocated by the government while the remainder, 15,000 million (10.2%) from private individuals (see Table 29). It is difficult to separate from this, those monies which were allocated to vocational education and training, if one also takes into consideration that apart from purely public or purely private financing there is also a third; mixed financing.



TABLE 29

Public and Private Expenditure on Education in 1981 and 1984, relating to basic macro-economic measurements (in million drachma, current prices)

<u>(1r</u>	million drachma,	current price	<u>(s)</u>
		1981	1984
Measurement			
1. Gross Domest	ic Product	1.856.745	3.310.000
1.1 Education	n	57.890	122.000
% of Edu	cation over (1)	3,12%	3,69%
2. Regular Budg	et Expenditure	368.750	722.000
2.1 Education	n	47.598	113.000
% of Edu	cation over (2)	12,9%	15,65%
3. Private Expe	nditure	1.148.151	2.498.000
3.1 Educatio	n	11.189	15.000
% of edu	cation over (3)	0,93%	0,60%
4. Investment B	udget Expenditure	121.500	276.000
4.1 Educatio	n	8.095	18.700
% of Edu	cation over (4)	5,67%	6,78%
. Total Public	Expenditure on		
Education (2	.1 plus 4.1)	55.694	131.700
% of (5)	over GDP	3,0%	3,98%
. Total (publi	c and private)		
Expenditure	on Education	66.683	146.700
(5 plus 3.1)		3,6%	4,43%
% of (6)	over GDP		
Source V VADA	140 10		

Source: K. KARMAS/S. PALAIOKRASSAS "Costs and Financing..."
Page 9.



TABLE 30

Total Current Expenditure on mainstream

and atypical vocational education/training (+) in 1984

by Finance Sectors (in 000 drs.)

	nancing Sectors and type		pes of Fi	فتقافاه كالمكا	·
<u>of</u>	education/training	Public	<u>Private</u>	Mixed	Total
1.	Public Sector	13409			<u>13409</u>
	a) Central Administration	11806			11806
	-Ministry of Education	10727			
	-Other Ministries	1079			
	b) Public Companies	1603			1603
2.	Private Sector		1029		1029
	a) Mainstream Education		616		616
	b) Atypical Education		413		413
	-Basic Education		180		
	-Further Education		233		
	-rur ther baucation		2))		
3.	Mixed Sector Financing			2727	2727
٠ د				2121	2121
	a) OAED - organisation				
	of labour force				
	employment			2001	
	b) Other bodies			726	
4 -	GRAND TOTAL	13409	1029	2 <b>72</b> 7	17165
٧.		-	· · · · · ·		
	% of (1) (2) (3) on (4)	78.1%	6.0%	15.9%	100%
		(1)	(2)	(3)	(4)

<sup>(+)</sup> The calculations were made by Messrs. K. Karma and S.



Palaiokrassas in the aforementioned work based on figures supplied by the National Treasury Service of the Ministry of the National Economy, the OAED's Public Relations department and questionnaire research by various private companies.

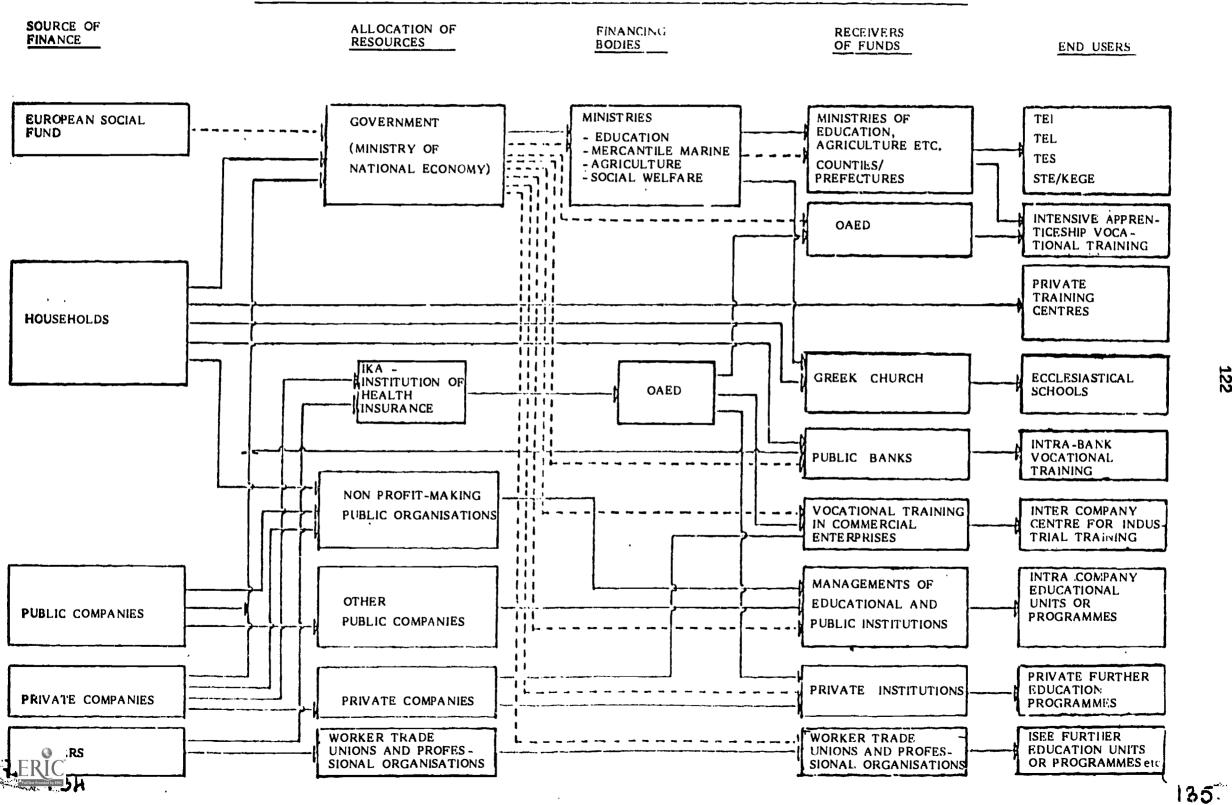
TABLE 30 shows an estimate of the total current (regular) expenditure on various vocational education/training programmes, public and otherwise. According to those estimates, the total current expenditure on vocational education and training was 17165 million drachma in 1984, of which 78.1% was covered by the public sector, 61.0% by the private sector and 15.9% by mixed financing operations.

The <u>financing mechanisms</u> for vocational education and training in Greece are many and varied; some recently established, others with a longer history. They are presented in Diagram 4, where the cash flow runs along 5 levels at various stages: Source of Finance - Allocation of Resources - Financing Bodies - Receivers of Resources/End-Users. It is clear that the differentiating factors for each level are the various operations which take place from source to the final end use of the cash resources.

Coordinating the allocation of operations and organisations creates an economic system with the following basic financors: The European Social Fund (EKT), Households, Companies (Public and Private) as well as workers through Worker Trade Unions and Professional Organisations. From the figures shown in TABLE 30 it is estimated that



#### DIAGRAM 4: FINANCE CASH FLOW FOR VOCATIONAL EDUCATION/TRAINING



private individuals are the major contributors since they directly contribute at least 796 million drachmas (616 million for mainstream and 180 for atypical education) while indirectly they contribute a sum which requires further investigation in order to determine its exact total. If however the state of public finances in Greece is taken into consideration, then it is believed that this sum is high enough so that private individuals are considered to be the major financors. (73)

Next are the <u>public and private companies</u> who contribute to vocational education either directly within their operations or indirectly by donating funds or other deposits. Also, private companies indirectly contribute 3.3% of their employees' salaries for training and further education of skilled staff, a sum which is appropriated by IKA and is repaid to the OAED, for funding apprenticeship programmes for young people and intensive training for adults.

Finally, all workers covered by IKA contribute to the funding of vocational training programmes in two ways: firstly by paying out 2% of their nominal IKA allowances, which, in its turn is transferred to the OAED: and secondly by paying a subscription (fee) to their trade union and /or to professional bodies which often organise atypical further education courses.

The EKT'S (European Social Fund) role as financors of vocational training does not require further analysis since



this is widely known.

The cash flow as presented in Diagram 5 shows firstly two types of financing: public and private. These two types - in various combinations - make up other secondary systems of mixed financing. Three cases which will be outlined below:

## 7.2.1. Public funding

Public financing is done in two ways: allocations from government funds and public enterprises. The government, wishing to cover its current needs, uses part of the public income on the one hand and on the other, in order to cover the investment budget, goes to internal or external borrowing. The Ministry of the Economy distributes the resources to the various ministries who have responsibility for vocational education and training. The total funds originate from the General Balance of Payments which is approved annually by Parliament and has two legs:

- the Current Budget and
- the <u>Investment Budget</u>.

The management of the funds for vocational education is under the supervision of the State Treasury which has subsections in each Ministry and Borough.

From the Ministries, the funds are channelled out to vocational schools or KETE or to a central



body which supervises vocational training centres. From these, sums are distributed to each educational unit. The budget is built up in entirely the opposite way, i.e. it begins with proposals from each KETE educational unit which are subsequently reworked and amended, by various intermediary bodies, mainly Borough councils - particularly where investment budgets are concerned - and are finalised by the responsible ministry. Based on all the Ministry proposals, the Ministry of the Economy allocates part of the State Budget and submits the proposal for Parliament's approval.

In the following Table, the sums which each vocational education Ministry-body spends are shown. In front by a large margin is the Ministry of Education which uses 90.0% of total regular expenditure. followed by the Ministries of Health and Welfare, Agriculture, the State Department and Mercantile Mar-Most of the remaining Ministries operate small internal training programmes for their personnel, frequently though on a non-permanent basis. Regarding organisations and enterprises which are directly or indirectly monitored by the government ( Banks, OSE (Greek Railways), EAS (Urba: Transport), HLPAP (Trolley Transport Company Athens/Piraeus), EAB (Greek Aerospace), EBO (Greek Weapons Industry) etc. ), their total expenditure on vocational training amounted in 1984 to 1603 million drachma of which 1023 million (=63.8%) came from their own resources while the remaining 580 million drachma (=36.2%) came from the



EKT - European Social Fund. (74)

# Various Ministries recular budgetary expenditure on vocational education in 1984 (in 000 drs, current prices)

	Ministry	Internal Programmes		Other expenditure on education	TOTAL
1.	State Depart-	51.900		176.000	227.900
	ment - STE (+)	-	-	(176.000)	
2.	Foreign Office	13.538	-	_	13.538
3.	Defence	21.600	-	-	21.600
4.	National Eco-				
	n¬my	21.996	-	-	21.996
5.	Public Works	1.000			1.000
6.	Justice	2.000	1.800		3.800
7.	Education (+)	200		10.727.171	10.727.371
	<ul><li>Secondary education</li><li>Tertiary</li></ul>	٠ -	-	(6.340.777)	
	education		-	(3.247.954)	
	- SELETE - EKT prog-	-	-	(210.000)	
	rammes	••	***	(928.440)	
8.	Agriculture - Intensive	6.000		189.000	195.000
	training - American	-		(170.000)	
	Agriculture School	_		(19.000)	
9.	Environment				
	and Town				
	Planring	2.000	-	~	2.000



10.	Health and				
	Welfare <sup>(+)</sup> - School for	-	3.700	328.000	331.700
	the Blind - School for Social Wor- kers			(20.000) (55.000)	
	<ul><li>Blind and Deaf-and-</li></ul>			(55.000)	•
	Dumb School - Nursing - EKT Prog-			(45.000) (50.000)	
	rammes			(158.000)	
11.	Transport				
	and Commun-				
	ications (+) - Vehicle mainten- ance tech-	15.000	-	8.000	23.000
	nician	-	_	(8.000)	
12.	Public Order - Officer	1.296		77.092	78.388
	training	-	-	(77.092)	
13.	Mercantile				
	Marine (+)	-	-	159.386	159.386
	TOTAL	136.530	5.500	11.664.649	11.860.679

Notes: (+) Supported by the EKT (European Social Fund)

Source: C. Karmas/S. Paleokrassas "COSTS AND FINANCING"

page 17, based on figures from the 1985 Balance

of Payments Budget and the Employment Ministry

(for the EKT)



## 7.2.2. Private funding

The direct financers of private vocational education are private individuals and private companies. Individuals finance a small number of approved private schools through the Education Ministry, which are attended by a relatively small number of students. There are no official statistics on finances for these schools. Based on the calculations in TABLE 30 it is estimated that in the 1984/5 scholastic year 616 million drachma were spent on around 7700 students in recognised private vocational schools. Beyond those schools providing mainstream education however, there are the "Liberal Studies Centres" which provide atypical training, and for which it is not possible to estimate their expenditure.

The Further Education provided by private enterprises is a relatively recent initiative in Greece and was first established by foreign operations. The total amount that is estimated to have been spent in 1984 by the private enterprises amounts to 86.2 million drachma. (75)

## 7.2.3. Mixed source funding

As stated previously in diagram 4 the two first types of financing, i.e. public and private, combined in various ways, make up a third type of "mixed financing" which in Greece is to be found basically in 4 different formats:



a) The extended system of vocational training (apprenticeship) for young people under 18, as well as the OAED's intensive training programmes for adults are both supported through mixed financing. The economic foundation of the OAED itself is based on contributions from employers and workers which are 3.3% and 2% respectively of their nominal salaries or daily wage. Moreover the execution of the educational programmes is supported by mixed financing, as can be seen from the following table. (76)

TABLE 32

OAED inflow and outflow of funds from 1980 to 1983
for all types of vocational training, broken down

by originating source and user category

(million drs, current prices)

		Econom:	ic Year	
Origin and Use of Funds	1980	<u> 1981</u>	1982	1983
1. Total Inflow from:	1011	1247	2003	2001
<ul> <li>Regular Budget</li> <li>Investment Budget</li> <li>OAED own funds</li> <li>EKT</li> <li>ETPA (European Regional Fund)</li> </ul>	201 810 -	273 888 86	781 974 248	51 970 681 164
2. Total Outflow for	1011	<b>-</b> 1247	2002	135
<ul><li>Current expenditure</li><li>Investment expend-</li></ul>	736	840	<u>2003</u> 1143	<u>2001</u> 1249
iture	275	407	860	752

It is clear from these figures that, among other things:



- i) the OAED drew on the regular National Budget's resources for the first time in 1983.
- ii) the contribution of the EKT began in 1981, first year of Greece's full EEC membership, while ETPA (European Regional Fund) first contributed in 1983.
- iii) The Community's total contribution increased in 1983 relative to 1982 but the load was distributed between the EKT and the ETPA allowing for a significant decrease in the former's allocation.
- iv) In the period 1980-83 current expenditure increased at a noticeably lower rate than that of investment expenditure.
- b) Two more organisations which offer, most times, vocational training and further education programmes through mixed financing are mentioned in this chapter. These are ELKEPA which draws resources initially from the National Investment Budget and EOMMEH which is financed from both the Regular Budget and the Investment Budget. These funds, together with sums from the two organisations' own resources and with the grants from the EKT constitute the sources of financing for related programmes. More specifically,
  - The ELKEPA Expenditures amounted to 505 mill-ion drachma in 1983, from 67 million drachma in 1980 (current prices) i.e. they almost doubled. EKT contributions which began in 1981 reached 220 million in 1983, i.e. 43.5%



of the total while 50.1% was covered by funds from the investment budget and the remaining 6.4% out of own resources. (77)

- II) EOMMEH Expenditures, again in current prices reached 170 million drachma in 1983 from 65 million drachma in 1980, i.e. an increase of about  $2\frac{1}{2}$  times. It should be noted that in the case of EOMMEH these types of expenditure only cover a small percentage of the organisation's overall budget (32.6% in 1980 and only 13.7% in 1983).
- A third category includes further education progc) rammes offered by worker trade unions, professional bodies, companies and chambers of commerce. Thus, the two largest trade union organisations in Greece, the GSEE and the PASEGES, provide further education programmes to union or cooperative personnel respectively. The GSEE uses the KEMETE (Research and Documentation Centre) for this while the Employment and Education Ministries and union member subscriptions are used as sources of funds. There are no official statistics from the GSEE but it is estimated that in 1984 the level of related expenditures was around 20 million drachma. (79)The PASEGES on its part, is financed by the ATE (Agricultural Bank of Greece), agriculture cooperatives, the regular national budget and the EKT. These funds increased from 6.4 million drachma in 1980 to 25.5 million drachma in 1983, which was when the EKT began to contribute, covering the



40.4% of overall expenditure. (80)

It was not possible to ascertain the expenditures of certain chambers of commerce on further education such as the <u>Geotechnical</u> and the <u>Hell-enic Technical Chamber of Commerce</u>. (81)

Finally, 4 more companies who provide further education programmes are mentioned, which are financed by EKT contributions as well as from their own resources. These are the EEDE (Greek Company of Business Management) with total 1984 expenditure at 14.5 million drachma (55% coverage from the EKT), Greek Students' Company with 5.5 million drachma (55% EKT contribution), the Greek Company of Business Research with 2.7 million drachma (55% EKT contribution) and the Greek Statistical Institute with 2.4 million drachma (55% EKT contribution). It is typical that all 4 bodies fully draw on their allocations from the EKT's funds, whose contribution ceiling is 55%.

d) Finally a fourth company inloudes the educational activities of the <u>Greek Church</u>. The various educational units (hagiography, Byzantine music and dance, housekeeping) are monitored and financed by the regional metropolis'. Their financial resources come from private contributions, bequests and gifts, from government grants and own resources. Official statistics are not available on expenditure levels. (82)



## 8. FUTURE TRENDS

All attempts and activities carried out up to today in the vocational training sector (such as passing laws, other reforms etc.) do not make up component elements of an overall simultaneous polemic, planning or framework of measures for all its levels, but took place separately for secondary and for tertiary level education. Future trends therefore which are emerging today for these two levels will also be viewed with the same perspective.

In the <u>secondary education sector</u>, before the application of Laws No. 309/76 and No. 576/77 have had enough time to "mature" and before adjustments to iron out essential weaknesses have been undertaken, the incumbent government has preceded to voting in a new law (1566/85) which took effect from 30.9.85 and which covers - among other things - the whole range of primary and secondary (general and vocational) education. The main areas of vocational training which will be affected and those areas to which this new law will bring future innovations are outlined below.

- a) Practical training for TES students (under the OAED's supervision) as well as TEL students is now being officially institutionalised, so that the studnets can add to their basic skills learned in school with an additional skill which will help them to better adapt to the current employment requirements.
- b) Another new institution are the "School Workshop Centres" (SEK) which are grouped together to service the practical training requirements of students from at least three scholastic units. Besides a more eff-



icient use of expensive and heavy workshop equipment, the SEK will also seek to cover areas where the small size of scholastic units do not permit a school work-shop allocation to be established.

- c) The OAED Apprenticeship Schools will be established as equal to the TES with regard to the professional rights of their graduates as well as the status of their teaching personnel.
- d) On the matter of practical training the possibility for OAED students to train in school workshop centres or laboratories will be created. On the other hand, Apprenticeship School workshops could be integrated into the SEK.
- e) According to the various laws up to today there were separate "General Education Committees" on the one hand and "Technical and Vocational Training Bureaus" on the other. Their responsibilities are now being merged, under the newly set up "Secondary Education Committee" so that along with the more effication operation of the new organisation, the effects and interrelationships between general and vocational training may be better evaluated.
- tional training programmes under the supervision of various different ministries, scholastic vocational training units outside the YPEPF's scope will in the future implement the instructions of Law 1566/85 regarding: the type, sector and department of specialisations in scholastic units, the language, the professional rights of graduates, the qualifications and



advancement of teaching personnel, as well as administrative matters (founding, abolishing, changing direction, organisation and operation).

With regard to <u>tertiary vocational education</u> the following future prospects are taking shape:

Almost two years after Law No. 1404/83 began to take effect and despite certain undoubtedly positive developments - quite a few serious problems have accumulated in the Technological Educational Institutions (TEI) with the result that, at the beginning of the 1985/86 scholastic year strong student movements - among other things - can be observed. The matters which require urgent solutions are the following:

- a) Legislation of professional rights. Any delay in decision-making and in issuing the relative Presidential Laws holds up the process of securing the status of TEI graduates as well as a more general recognition of the upgraded role of these institutions.
- b) Improvement of materials and technical matters or even filling the gaps in vital methods and equipment in the new Specialisation Departments, so that they can either be improved or can begin to operate properly.
- c) Staffing with satisfactory level teaching and administrative personnel. Recognition of past deficiencies prescribes the establishment from now on (through the law) of stricter preventative criteria something though which will probably lead to short delays



in selecting teaching personnel.

- d) The shift in the centre of gravity from the technological professions to the services industry not
  only due to tight structuring but also to a corresponding increased demand on the job market (e.g. health professions).
- e) The decrease or stabilisation at least of the rate of increase in entrants and graduates of the TEI, when the corresponding selection and evaluation criteria are actually upgraded.
- f) The complete integration into the TEI of schools such as the Tourist and Health Professions which operate up to now under the supervision of other ministries (Presidency and Health and Welfare).

If the responsible state services and those bodies directly involved (teachers, students) show capable of providing suitable qualitative solutions on the above-mentioned subjects, a corresponding qualitative improvement and development of the TEI is possible which might lead to a lessening of the gap between them and university education.



## APPENDIX



TABLE 1: Population 10 years plus by age group, sex and level of education in 1981 (000s)

LEVEL OF EDUCATION

For explanations of numbers 1 - 10, see following page

100 00										
AGE GROUPS	1	2	3	4	5	6	7	В	9	ro
Both sexes	8215.0	329.5	156.0	154.8	1116.6	813.8	3604.3	1281.8	706.7	51.5
Age 10-15	1001	•••	•	949	•••	49.9	463.7	256.4	5.7	7.1
12-13	720.3	-	1.3	55.0	99.1	321.0	224.2	7.7	7.3	4.6
20-24	710.0	24.5	25.2	81.6	204.8	80.9	270.8	9.4	7-4	5.4
23-29	662.9	67.1	30.0	13.7	163.3	71.5	289.1	14.0	8.9	5.4
30-14	653.2	62.0	24.0	2.6	131.4	53.0	343.6	22.5	9.5	4.7
: 3-39	554.6	40-4	15.5	0.8	95.2	38.9	305.5	39.4	14.9	3.9
40-44	659.3	33.6	15.5	0.5	98.6	39.2	328.6	101.9	37.6	3.8
44-49	664.1	25.7	13.4	0.3	87.0	35.0	275.3	158.4	65.9	3.2
30-34	669.5	20.9	9.2	0,1	.74.1	29.0	315.2	161.9	55.7	3.3
22-29	489.0	15.8	5.3	0.1	48.4	21.0	244.3	102.5	48.8	2.6
0- 4	409.9	12.4	5.3	0.1	37.3	21.0	180.2	91.6	59.8	2.3
70-74	420.0	11.4	4.6	-	33.1	22.2	145.7	109.8	99.6	2.3
75-79	356.7	7.7	3.9	-	22.5	15.3	102.9	94.9	108.1	1.4
80-84	241.7 136.7	5.2	1.7	-	12.3	8.9	67.2	63.8	82.0	0.6
′′ 85 ∔	•	1.9	0.9	-	6.6	4:7	33.7	32.2	56.5	0.3
Did not reply	74.4	0.9	0.3		2.9	2.1	14.0	15.1	38.8	0.2.
	y <b>1.5</b>	• • •	•••	• • •	0.1	0.1	0•4	0.2	0.2	0.4
Male	3995.6	229.0	82.5	92.3	537.6	480.4	1826.6	577.2	143.3	26.8
Female	4219.4	100.5	73.4	62.5	579.0	333-4	1777.8	704.7	563.5	24.8
									<del>-</del>	

Source: ESYE, Greek Statistical Year Book 1983 page 103

- 1. TOTAL
- 2. HIGHER EDUCATION GRADUATES
- 3. FURTHER EDUCATION GRADUATES
- 4. STUDENTS OF HIGHER OR FURTHER EDUCATION
- 5. GRADUATES OF MIDDLE LEVEL (SECONDARY) EDUCATION
- 6. 3RD YEAR SECONDARY (OBLIGATORY) EDUCATION GRADUATES
- 7. ELEMENTARY EDUCATION GRADUATES
- 8. DID NOT FINISH ELEMENTARY EDUCATION
- 9. ILLITERATES
- 10. DID NOT REPLY



TABLE II: Population aged 14 plus by level of education, employment situation and sex (total country)

Age Groups by sex	Total	Agricul- ture, Cattle Breeding, Forestry Hunting Fishing	Mining Quarry, metal & salt mining	Indus- try, Handi- crafts	Elect- rical, gas, steam & water services	Constru- ction & public works	Commerce restaurants hotels	Trans- ports, Ware- housing, Commun- ications	Banks, Insur- ance, real estate, manage- ment	Services	Non- replies
Both sexes	3530,9	1083,5	16.2	AND U		COUNTRY	674.6	273 U	1167	\$43 B	
14 years	12,8	6,9	19,2	8,086	30,3	292,6	528,6	273,H	116,7	503,8	1,7
15 - 19 years	158,7	51,5	0.3	3,1	43.4	1,4	1,1	0,1		0,2	
M 24 .	231,8	43,0	0,3 0,9	54,1 67,8	U,4 1,1	18,2 21,3	22,2	4,5	1,6 c'c!	5,8	
16 10	370,6	55,4	1,8	91,1	3,9 .	44,7	41,3	15,9	12,2	27,9	0,3
W • 44 years	1242,9	272,7	8,6	252,4	15.2		59,7	29,6	20,9 50.7	63,3	0,2
15 • 64 years	1322,9	521,6	7,3	202,0	4,6	123,1 82,0	182,3	120,7	50 <b>,7</b>	216,6	U,4
years plus	191,2	132,3	0,2	10,2	0.1	1,9	191,9	99,5 3.6	28,7	179,5	8,0
Men	2423,5	622,4	18,8	486,0	26.1	2,17 2,18:5	29,9 150.7	3,6	2,6	10,5	1.6
1 <sub>4</sub>	8,2	4,0		1,9		1,4	359.7	247,4 U,1	78,1	292,9	1,5
years years	98,2	29,3	U,3	32,5	11,4	18,0	0,7 12,4	3,5	<u> </u>	0,1	. —
20 - 24 years	122,3	23,8	0,9	36,7	8,0	20,9	17,1		υ,5 2,4	1,3	. —
<b>5 - 29</b> years	249,5	33,1	1,7	56,6	3,0	44,3		10,7		8,7 25.0	0,3
0 - 44 years	863,0	140,0	8,5	186,4			38,9	24,6	11,3 37,3	25,9	0,1
15 • 64 years	939,4	299,1	7,1	153,0	12,7 9,2	122,4 81,5	122,7 143,5	109,1		123,5 124,9	0,3
5 , years plus	142,7	93,0	0,2	8,9	7,2	1,9	24,3	95,9 3,5	24,2 2,5	8,6	8,0
Vomen	1107,5	461,1	0,4	194,8	4,2				38,5		0.1
14 years	4,6	2,9		1,2	~,2 ~~	2,1	168,9 0,4	26,4 —	 	210,9 0,1	U,1
5 . 19 years	60,5	22,3		21,7		0,2	9,8	0,9	1,1	4,5	
10 - 24 years	109,5	19,2		31,1	0,3	0,3	24,2	5,2	9,8	19,3	
15 • 2.1 years	121,1	22,3	0,1	24,5	0,9	0,4	24,2	5,2 5,0	9,6	37,5	0,1
10 • 44 years	379,8	132,7	0,1	66,U	2,5	0,7	20,6 59,6	11,6	13,4	93,1	U,1
15 - 64 years	383,6	222,5	0,1	49,0	0,4	0,7	48,4	3,5	4,5	54,6	O'1
years plus	48,5	39,3		1,3	0,4 0,1	···	5,7	0,1	0,1	1,9	

154

Source: ESYE, Labour Force Survey (Employment) 1981, Athens 1983



4.00

TABLE III: Labour force requirements of the Greek economy and required number of students of middle, further and higher technical-vocational training (current estimations)

Category of employed persons —		Number of Employed		New Requirements		Requirements to replace outgoing		Total Requirements		1975-1985 average annual figure			
		1975	1980	1985	1975-KO	1980-85	1975-80	1980-85	1975-HI	1980-85	1st year stud- ents	Total stud- ents	Grad- uates
١.	DEGREE HOLDERS								266.6JN	296HXI	97.720	262.540	56,290
•	Higher Education	164.000	194.000	229.MM	30,000	35,000	9.1(X)	9,700	39.100	44,700	16.180	55.220	8,386
• .	Mathematics-Physics Schools	17.1(x)	20,400	24.3(X)	3.3(N)	CKNV,F,	1,100	1.200	4.4(X)	5.1(X)	1.430	5.27()	950
2.	Polytechnics	17.6(X)	21.(KK)	24,9(K)	3.4(x)	3.9(X)	1.100	1,2(N)	4,500	5,1(XI)	2.000	6.920	966
•	Medical Schools	24.3(N)	2H.7(X)	33,4(x)	4,4(X)	4.7(X)	1.,500	1,600	5.9(N)	6.300	1,170	7.610	1.220
•	Economics, Law, Social Science	79.6(X)	95,300	114,400	45.700	19.100	4.5(M)	4.7(X)	20,200	23,H(N)	9,730	29.4HI)	4.4(X
•	Humanitarian Studies	15.4(K)	IN.6(X)	22.(NN)	3.2(n)	3.4(N)	מאל	1,(XX)	4.100	4,400	1.850	5.950	850
•	Indeterminate Studies*	10.0xx)	(KK),(O)	(KK),(D)	-						_		
Ļ	Further General Education	40.000	48.000	56.(NN)	A.O(N)	8.600	2.500	2.600	10.500	10,600	2.540	5,340	2.110
II.	Upper TEE								27.0(X)	31.000	11.000	22,000	5.800
•	Technology-Mechanical Engine	eering							11,600	13.4(X)	S.(NN)	11.000	2.5N
•	Para-medical Professions								2.8(N)	8.200	1,400	2,900	600
•	Business and Social Sciences								8.3(X)	9,700	3,500	5.900	1.800
	Other cateogires	2.976.000	3.021.000	3.668,000	45.(XX)	47,(NN)	355,400	404,700	4,3(X)	4,700	1.100	2.200	900
V.	Middle and Lower TEE							· ·	190,000	210.000	68.000	180.000	40.000
	NON-DEGREE HOLDERS								188.400	210.900	•••		-
•	TOTAL (A + B)	3.180.000	3.263.(NX)	3.353.000	NJ.(NN)	90.(NN)	367.000	417.000	450.000	507.(NIO	-		-

<sup>\*</sup> According to the 1971 census these are employed in the "services sector" in indeterminate work. This is probably graduates in temporary employment looking for suitable positions. Available statistics do not permit estimates of remaining upper middle and lower TEE students in 1975, 1980 and 1985.

Source: G. Psaropoules and A. Kasamias: Survey of Development of Post-Gymnasium Education



TABLE IV: Employees in single figure private enterprises, by age groups and by sex (000s)

Age Groups and sex	Total	Scien- tists, Self- employed etc.	Directors and upper Manage- ment	Office Workers	Business - men and Statesmen	Employees in the Service Sector	Farmers, cattle breeders, Forestry workers, Fishermen etc.	Technicians and workers (exc. agriculture) Transport Workers	Non- categor ised persons
			<u>TO</u>	TAL COUN	TRY				
TOTAL	3529,3	340,9	73,7	313,8	343,9	274,5	1084,3	1075,8	22,3
14 year	12,7	-		0,1	0,8	0,7	6,8	4,4	
<b>5 - 19</b> year	158,7	1,6		, 7,4	12.5	10,9	51,3	74,6	0,4
<b>0 - 24</b> year	231,7	16,1	0,1	44,2	22,5	18,4	42,7	85,5	2,3
5 - 29 year	370,4	54,1	2,1	57,3	8,06	26,4	54,9	141,0	3,8
<b>U - 44</b> year	1242,0	170,5	28,8	125,3	121,7	97,9	271,7	416,5	9,5
5 - 64 year	1322,7	91,0	40,8	75,5	134,2	110,3	524,2	340,4	6,3
5 years plus	191,1	7,7	1,9	4,0	21,5	9,9	132,8	13,3	
Male	2423,3	223,0	66,1	171,4	244,0	167,4	624,7	904,6	22,0
14 year	8,2			0,1	0,5	0,4	4,0	3,3	
<b>5 - 19</b> year	98,2	0,6		2,5	5,9	6,3	28,9	53,6	0,4
<b>) - 24</b> year	122,3	6,4	0,1	7,4	10,1	8,9	23,6	63,8	2,1
5 <b>- 29</b> year	249,5	27,2	1,9	23,7	20,3	17,9	32,8	121,9	3,8
) - 44 year	863,0	113,5	25,3	70,9	85,6	61,0	139,9	357,5	9,5
5 <b>- 64</b> year	939,3	68,3	36,9	63,5	103,7	65,9	301,9	292,7	6,3
years plus	142,7	7,1	1,9	3,4	17,9	7,0	93,6	11,8	
Fema le	1106,0	117,9	7,6	142,4	99,9	107,1	459,6	171,2	0,3
14 year	4,5		****		0,3	0,3	2,8	. 1,1	
5 - 19 year	60,5	0,1		4,9	6,5	4,7	22,3	21,0	-
) - 24 year	109,4	9,7		36,8	12,5	9,5	19,1	21,7	0,2
5 - 29 year	120,9	26,9	0,2	33,7	10,5	8.5	22,1	19,1	- ,
) - 44 year	379,0	57,0	3,5	54.5	36,1	36,9	131,9	59,1	0,1
5 - 64 year	383,3	22,7	3,9	11,9	30,5	44,4	222,3	47,7	-,-
5 years plus	48,4	0,6		0,6	3,6	2,9	39,2	1,5	

155 ERIC

Source: ESYE, Labour Force Survey (Employment) 1981, Athens 1983

### TABLE V

## I. TECHNICAL LYKEIONS

## Sectors

## 1. MECHANICAL ENGINEERING

## Departments

- a) Heating and Refridgeration Installations
- b) Industrial installations and Industrial productions
- c) Engineering/Draughtsmanship
- d) Precision instruments
- 2. ELECTROLOGY AND ELEC-TRONICS
- a) Domestic electrical installations
- b) Industrial electrical installations
- c) Electronic installations and automation

3. CONSTRUCTION

- a) Road building and hydraulic works
- b) Building construction
- c) Civil engineering and architecture
- 4. CHEMISTRY AND METAL-LURGY
- a) Chemistry lab workshops
- b) Industrial Chemistry
- c) Mining



5. TEXTILES

- a) Spinning
- b) Weaving
- c) Dyeing
- d) Knitting

6. APPLIED ART

- a) Printing
- b) Ceramics and glass-blowing
- c) Music
- d) Art and sketching
- e) Furniture design
- f) Graphic arts
- g) Interior decoration
- h) Maintenance of artistic works and ancient monuments
- i) Mosaics and glass-making
- 7. INFORMATION TECHNOLOGY
- a) Electronic data processing programmers

# II. VOCATIONAL LYKEIONS Sectors

1. ECONOMICS AND MANAGE-MENT

### Departments

- a) Management
- b) Accounting
- c) Hotel industry
- d) Shipping and Transport Industry
- e) Commercial enterprises



- 2. AGRICULTURE AND CATTLE BREEDING
- a) Floriculture
- b) Agricultural machinery
- c) Horticulture
- d) Animal production
- e) Farming industry and Agricultural management
- f) Fishing and fish-farming
- g) Forest production
- 3. SOCIAL SERVICES
- a) Medical Assistants and Biological workshops
- b) Dental Technician
- c) Baby and Childcare
- d) Nursing assistants
- e) Medical visitors
- f) Medical instrument handlers

4. NAVY

- a) Merchant Navy Captain
- b) Merchant Navy mechanical engineer
- 5. NAVAL-STUDIES:
  ALTERNATING TRAINING
  PERIODS
- a) Ship's Engine engineer
- b) Ship's Electrician
- c) Deck Engineer
- d) Ship electronics
- e) Merchant Navy Captain



TABLE VI

Young people entering, studying (in total) and are candidates for a degree from the OAED Apprenticeship Schools from 1972-1984

Scholastic Year	Entrants	Total	Graduates (a)
1972/73	4.766	9.434	1.774
1973/74	4.414	10.210	1.987
1974/75	4.732	10.968	2.229
1975/76	3.999	10.350	2.328
1976/77	3.844	9.929	2.490
1977/78	4.190	9.626	2.055
19 78 / 79	3.6 03	10.265	2.055
1979/80	4.183	9.281	1.909
1980/81	3.477	9.629	2.970
1981/82	3.418	8.448	2.110
1982/83	2.825	8.307	2.858
1983/84	3.796	7.453	2.143
1984/85	3.938	8.474	1.793 <sup>(b)</sup>

(a): Candidates for a degree

(b) : Estimate/projection

Source : OAED



## **ABBREVIATIONS**



### ABBREVIATIONS

ADSEN : Higher Public Schools of the Merchant

Navy

AEP : Gross Domestic Product

AEI : Institutes of Higher Education

ASETEM : Higher School of Technology and Mech-

anical Engineering Lecturers

ATE : Agricultural Bank of Greece

GGLE : General Secretariat of Adult/Further

Education

GSEE : General Association of Greek Workers

DEH : Electric Company

EAB : Greek Aerospace Industry

EAS : Urban Transport Company

EBO : Greek Weapons Industry

EEDE : Greek Association of Business Manage-

ment

ELKEPA : Greek Centre of Productivity

ELTA : Greek Post Office

EOMMEH : Greek Company of Small and Medium-

sized Manufacturing and Handicraft

Businesses

ESYE : National Statistical service

H/Y : Electronic Computers

HLPAP : Trolley Bus Company of Athens, Piraeus

and Suburbs

IKA : Institute of Social Welfare

ITE : Institute of Technological Education



KATEE	:	Centres for Higher Technical and
		Vocational Education
KEGE	:	Centre of Agricultural Education
KEME	:	Centre of Educational and Further
		Education Surveys
KEMETE	;	Centre of Researh and Documentation
KEPE	:	Centre of Planning and Economic
		Research
KETE	:	Centre of Technical Education
KETEK	:	Centres of Technical and Vocational
		Training (formerly KEKATE AND KTEED)
OA	:	Olympic Airways
OAED	:	Organisation for Manpower Employment
OEDB	:	Organisation of Didactical Books
		Publication
OHE	:	United Nations
OOSA	:	Organisation of Economic Cooperation
		and Development (OECD)
OSE	:	Creek Railways
OTE	:	Greek Telecommunications Organisation
PATES	:	Pedagogical Technical School
PRODE	:	Additional Continuous Training
SELETE	:	School for Teachers of Technical and
		Vocational Training
STE	:	Council for Technical Education
TEE	:	Greek Technical Chamber of Commerce
TEI	:	Technical Educational Institutions



TEL

TES

: Technical and Vocational Lykeions

: Technical and Vocational Schools

YPEN

YPEPF

: Ministry of Mercantile Marine

: Ministry of National Education and

Religions (usually shortened to

Ministry of Education)

FEK

: Government News Bulletin



## ANNOTATIONS



## ANNOTATIONS

- 1. ESYE, 1983 volume, page 17.
- 2. ESYE, 1980, 1983 volumes, diagrams.
- 3. ESYE, 1983 volume, page 17.
- 4. ESYE, Greek Natural Population movement statistics, Athens 1982 page XXI.
- 5. ESYE, Greek Natural Population movement statistics, Athens 1982 page LIII.
- 6. See 1983 volume, pages 17-18.
- 7. ESYE, 1971, 1977, 1981 volumes, "Employment" chapters.
- 8. S. Papaspiliopoulos "Surveys of Contemporary greek Economy" Athens 1984. Note 16.
- 9. See "1983 Labour Force Survey" ESYE, Athens 1984, page 8.
- 10. See "1983 Labour Force Survey" ESYE, Athens 1984, page 10.
- 11. See "1983 Labour Force Survey" ESYE, Athens 1984, page 10.
- 12. See Th. Katsanevas "Employment and Unemployment in Greece" Athens 1985, page 28.
- 13. See Th. Katsanevas "Employment and Unemployment in Greece" Athens 1985, page 42.
- 14. See ESYE, "Labour Force Survey..." page 17 etc.
- 15. See ESYE, "Labour Force Survey..." page 7 etc.
- 16. See ESYE, "Labour Force Survey..." page 17.
- 17. See Th. Katsanevas "Employment and Unemployment in Greece" Athens 1985, page 4.
- 18. See "Oikonomikos Tachydromos" 3.5.84 pers 54.
- 19. See "The Greek Economy Today" KEPE Athens 19^4 page 18.



- 20. See "The Greek Economy Today" KEPE Athens 1984 page 17.
- 21. See YPEPF/P. Demouder, D. Vergides, T. Varnava-Skoura "Adult Education in Greece" Athens 1984, page 26.
- 22. See Th. Katsanevas "Employment and Unemployment in Greece" Athens 1985, page 31.
- 23. See KEPE "The Five-Year Economic and Social Development Plan 1983-87 Summary" Athens 1984, page 46.
- 24. See S. Stavrou "Problems and Opportunities for Vocational Training in the socio-economic Readjustment in Greece (German), Berlin 1980 didactical thesis, pages 39-40, 99.
- 25. An extensive description and documentation of these weaknesses would fall outside the framework of this text, therefore the interested reader is referred to the specific (if not too full) bibliography on the subject such as eg: a) Psaropoulos/Kazamias "Study of Post-Gymnasium Education" Athens 1978 b) KEPE 5-year Programme 1978-82, volume on education..." page 39.
- 26. See S. Stavrou "Problems and Opportunities..." page 39.
- 27. See G. Daskalou "Agricultural Education..." article in the Oikonomico Tachydromo of 1st May 1985.
- 28. See G. Daskalou "Agricultural Education..." article in the Ojkonomico Tachydromo of 1st May 1985.
- 29. The apprenticeship schools are not included in the study courses for Greece not just because they provide atypical vocational training but also because including them in the YPEPF's list of courses would create a misleading picture especially since both organisations often overlap i.e. both using the same titles, and



- similar programmes. In order to avoid misconstruals, we specify once again that professions are only regarded as officially recognised when they are strongly and single-mindedly tied to prior corresponding vocational training.
- 30. See S. Stavrou "Problems and Opportunities..." pages 38-39 and YPEPF "Technical and Vocational Lykeions and Schools" OEDB Athens 1985 pages 13-15 and 34-36.
- 31. See the German magasine "Der Gewerkschafter" 1/85 issue pages 15-19, 24-25.
- 31a. For further analysis of the problems see: D. Batsi:
  "Heavy Industry in Greece" Athens 1947, D. Bena: "The
  invasion of foreign capital into Greece" Athens 1976,
  A. Kinti: "Development of Greek Industry" Athens 1982,
  T. Yiannitsis: "Greek Industry Development and Crisis" Athens 1985, as well as the corresponding findings
  in: S. Stavrou "Problems and Opportunities..." pages
  113-118.
- 31b. See T. Yiannitsis "Greek Industry..." pages 35-36.
- 31c. For further analysis of these activities see S. Stavrou "Problems and Opportunities..." pages 87-99.
- 31d. For example: N. Glytsou P. Fakiola: "The Greek Economy's labour force requirements" Athens 1977, G. Psacharopoulou A. Kazamia "Development Survey of Postgymnasium education," YPEPF Athens 1978, EOMMEH "Summary Findings of industrial training requirements and developments in Greece. Requirements and trends in the following 5 years Athens 1981, K. Efstratoglou A. Bouga "Professions in demand on the job market" OAED Athens 1982, A. Vorloou, T. Lambropoulou, G. Vafeiades



"Employment in the basis sectors of the Greek Economy in 1987 - Growing and declining professions" KEPE Athens 1983, as well as the pilot survey of the Athens ITE-TEI for the future development of Western Attiki area, which will form the basis of related educational programming (Commencement of survey November 1984 - projected completion July 1986).

- 32. ESYE: "Education Statistics" volume up to 1979/80 and Press Releases.
- 33. Source: "YPEPF Technical and Vocational Lykeions and Schools" OEDB, Athens 1985, page 10.
- 34. These estimates are included in K. Karmas' and S. Pala-iokrassas' survey, entitled "Costs and Financing of Vocational Education and Training in Greece" which was written for the "European Centre for the Development of Vocational Training" (CEDEFOP) Athens 1985 pages 4-6.
- 35. See YPEPF "Technical and Vocational Lykeions and Schools" pages 34-36. For details on development see Appendix.
- 36. See ditto, pages 12-14 where detailed structure and department names can be found in the Appendix.
- 37. For an analytical description of alternative solutions being offered to TEL graduates see also the corresponding YPEPF volume, pages 25-26.
- 38. This concerns current perceptions and attempts to solve the flexibility and adaptability problem on vocational training, with a parallel improvement in its status in the eyes of the public. On corresponding experiences gained in W. Germany see also S. Stavrou "Problems and Opportunities.." pages 130,182,193.



- 39. YPEPF, Department of Educational Surveys, unpublished student movement figures.
- 40. See YPEPF "The Integrated Comprehensive Lykeion" OEDB Athens 1984 page 1 and 24.
- 41. The following figures are included in the Study Guide volume A YPEPF/KEME, Athens 1984 pages 93/94.
- 42. For further details see ditto pages 132-214.
- 43. All references to figures originate from the Study Guide pages 215-218, as well as from statistics, facts and information given through personal collaboration with the Director of OAED Apprenticeship programme Mrs. Asp. Patouha.
- 44. For further details on student movements see Appendix, Table V.
- 45. On this subject as well as the following programmes refer to the detailed description in the corresponding pamphlet which the organisation circulated in 1984, entitled: "Vocational and Technical education in the OAED."
- 46. See also "Essay for the European Community Commission: Vocational Training for Young People in Greece" submitted by the YPEPF on the occasion of 1985, the year of Youth, pages 9-11, introduction (unpublished).
- 47. See, among others, S. Stavrou "Problems and Opportunities..." pages 140 to 160 and 209 to 216.
- 48. See, in comparison, Laws 152/70, 576/77 and 1404/83.
- 49. Based on the comparison of Laws 576/77 and 1404/83.
- 50. See also YPEPF/EY-TEI "Technological educational Institutions - Outline of Programmes," Athens 1985, page 11.
- 51. See ditto page 11.



- 52. See among others: YPEN "Notification of Student entries to the ADSEN" 25.7.1984. Other information through personal interview with the Management of Organisation and Administration of the YPEN Schools.
- 53. The information was obtained through personal interview with the Management of Medical development and Medical Services department of the Ministry of Health and Welfare.
- 54. Further information available from the EOT's full written reply to a questionnaire sent by the OAED to all technical and vocational training bodies on 10.3.83 (Coordinator responsible: Mrs. Aik. Grakiotou), for a CEDEFOP survey on the cost and financing of the latter. This information was amended according to recent developments in a very enlightening discussion between the author and the Director of the STE Organisation at the EOT, Mr. Micho.
- 55. See Note 45
- 56. For further details see: Ministry of Agriculture,
  Agricultural Management, Education and Information/
  Agricultural Application General Agricultural Technology Programmes, Athens 1985.
- 57. See Note 54
- 58. See also corresponding informative volume of the Inter Company Association
- 59. See also ELKEPA, EEDE, EOMMEH, constitutional as well as informative pamphlets
- 60. See "Organisation/Regulation of Adult Education" Government Bulletin of 22.10.1982 Article 826, B. Issue
- 61. See "Adult Education in Greece" YPEPF/GGLE, Athens 1984 page 60. The lack of clear differentiation is indica-



- tive of the deficient analysis and documentation of definitions/terms for Greek education.
- 62. "Greek Education The Reform which did not happen" by A. Dimara, Athens 1974, Volume A and B, and E. Hadjimanolis "Schule und Entwicklung", Cologne and Berlin 1972 (Dissertation) are referred to here as examples of more extensive Bibliography.
- 63. See S. Stavrou: "Financing of Vocational Training in Greece" article in CEDEFOP's magasine "Vocational Training" (German) Issue No. 15, Berlin 1984.
- 64. See ESYE, Education Statistics 1972/73 to 1979/80 as well as unpublished YPEPF statistics
- 65. See related polemic and for older reforms see S. Stavrou "Problems and Opportunities..." pages 54-60.
- 66. This information was given in an interview with the Executive Director of Vocational Training at the YPEPF, Mr. Tranoudi
- 67. This information was taken from an interview with the Director of OAED Apprenticeship Programmes, Mrs. Asp. Patouha.
- 68. The criticism refers to the complete lack of documented policy on vocational training from the SEB, with detailed proposals.
- 69. This programme which is still in operation was initiated by CEDEFOP in January 1983, then at the instigation of the European Commission. The scientific methodology includes the separate but coordinated presentation of 4 elements or categories: a) movements of individuals b) Educational environment c) Financial channels d) Financing Bodies



- 70. See S. Stavrou "Kosten und Finanzierung der Berufsbildung in Griechenland" Salonica 1984, where emphasis is given to the first 2 categories and C. Karmas and S. Paleokrassas "Costs and Financing of Vocational Education and Training" Athens 1985 where attention is focused on the 2 latter categories (photocopies).
- 71. All the facts and figures to follow come from the innovative and very interesting study "Costs and Financing..." by K. Karma/S. Paleokrassas pages 8-29 and 36-38, where there are very extensive analyses.
- 72. By "mixed financing" we mean that which is being used in conjunction with resources from management, managers, the European Social Fund etc. A classic example of such a body in Greece is the OAED.
- 73. See Karmas/Paleokrassas . . . page 13
- 74. See ditto page 19, Table 5
- 75. See ditto page 22. This amount, however, is part of the co-financed (by the State and the EKT) programmes and is mentioned only in order to show the level of own resourced from private companies (see also Table 6).
- 76. See ditto page 24, Table 7
- 77. See ditto page 25, Table 8
- 78. See ditto Table 8
- 79. See ditto page 27
- 80. For further details see ditto page 27, Table 9
- 81. See ditto page 27
- 82. See ditto page 29



## BIBLIOGRAPHY



## **BIBLIOGRAPHY**

- A. VORLOOU, T. LAMBROPOULOU, G. VAFETADI: "Employment in the basic sectors of the Greek Economy in 1987 Growing and declining Professions." KEPE, Athens 1983.
- T. "IANNITSI: "Greek Industry Development and Crisis" Athens 1985 (2nd Edition).
- N. GLYTSOU-P. FAKIOLA: "The Greek Economy's Labour Force Requirements" Athens 1977.
- A. DIMARA: "Greek Education The Reform which did not happen" Volume A and B, Athens 1974.

ESYE: "1983 Labour Force Survey" Athens 1984

ESYE: "Greek Statistical Yearbooks" 1971 to 1983.

ESYE: "Education Statistics" 1970/71 to 1979/80

ESYE: "Natural Population Movement Statistics" Athens 1982

Th. KATSANEVA: "Employment and Unemployment in Greece" OAED Athens 1985

C. KARMAS'S. PALEOKRASSAS: "Costs and Financing of Vocational Education and Training in Greece" Study undertaken on behalf of CEDEFOP Athens 1985



KEPE: "15-year model Greek development programme 1972-1987 Athens 1972

KEPE: "5-year programme of economic and social development 1976-1980", Volume on Education Athens 1976

KEPE: "The five year Economic and Social Development Plan 1983-1987/Summary" Athens 1984

KEPE: "The Greek Economy Today" Athens 1984

A. NTI: "Development of Greek Industry" Athens 1982

D. BATSI: "Heavy Industry in Greece" Athens 1947

D. BENA: "The Invasion of Foreign Capital into Greece" Athens 1976

P. DEMOUDER, D. VERGIDI, T. VARNAVA-SKOURA: "Adult Education in Greece", YPEPF Athens 1984

OAED: "Vocational and Technical Education in the OAED" (Information Bulletin) Athens 1984

OECD: "The Mediterranean Regional Project - Greece" Paris 1965

S. PAPASPILIOPOULOU: "Surveys on the Contemproary Greek Economy" Athens 1978

- S. STAVROU: "Probleme und Perspectiven der Berufsbildung in der sozio-okonomischen Umwälzung Griechenlands" Berlin 1980 (Dissertation)
- S. STAVROU: "Costs and Financing of Vocational Training in Greece". A study carried out for CEDEFOP. Salonica, 1984

YPEPF: "Study Guide - Volume A: "After the Gymnasium" OEDB Athens 1984

YPEPF: "What road to take after the Lykeion" OEDB Athens 1985

YPEPF: "Technical-Vocational Lykeions and Schools", OEDB Athens 1985

YPEPF: "The Integrated Comprehensive Lykeion" OEDB Athens 1984

YPEPF/EY-TEI: "Technological and Educational Institutions - one year after ..." Athens 1984

YPEPF/EY-TEI: "Technological and Educational Institutions Programme Outlines" Athens 1985

YPEPF/GGLE: "Adult Education '85" Informative Bulletin of the Adult Education conference in Athens March 1985

YPEPF/OAED: "Estimates and Opportunities for Employment in Greece "OEDB Athens 1983



YPEPF/Statistical Service: Temporary, unpublished figures for 1980/81 to 1982/83 scholastic years

YPEPF/DIRECTION OF VOCATIONAL-EDUCATIONAL TRAINING: Student movement statistics to 1984/85 (temporary)

MINISTRY OF AGRICULTURE: "Agricultural Technicians General Education Programme" Athens 1985

E. HADJIMANOLIS: "Schule und Entwicklung" Cologne and Berlin 1971 (Dissertation)

G. PSARAROPCULOU/A. KAZAMIA: "Post-Gymnasium Education Survey" YPEPF Athens 1978

### ARCHIVES

Government Newspaper (FEK) - Education Laws: N.D. 652/70, N. 309/76, N. 576/77, N. 1404/1983

OIKONOMIKOS TACHYDROMOS (Weekly Economics Magazine)

IMERISIOS TYPOS (from articles which refer to vocational training) published



CEDEFOP — European Centre for the Development of Vocational Training vocational training in Greece

Stavros Stavrou

Luxembourg: Office for Official Publications for the European Communities

1987 — 175 pp. — 21.0 x 29.7 cm

DE, GR, EN, FR

ISBN 92-825-6585-8

Catalogue number: HX-45-86-846-EN-C

Price (excluding VAT) in Luxembourg ECU 4 BFR 180 IRL 2.90

**UKL 2.50** USD 4



# Venta y suscripciones · Salg og abonnement · Verkauf und Abonnement · Πωλήσεις και συνδρομές Sales and subscriptions · Vente et abonnements · Vendita e abbonamenti Verkoop en abonnementen · Venda ε assinaturas

#### BELGIQUE / BELGIE

Moniteur belgs/Belgisch Staatsbled Rue de Louvain 40-42/Leuvensestraat 40-42 1000 Bruxelles/1000 Brussel Tél. 512 00 26 CCP/Postrekening 000-2005502-27

Sous-dépôts/Agentschappen:

Librairie européenne/ Europese Boekhandel Rue de la Loi 244/Wetstraat 244 1040 Bruxelles/1040 Brusse!

#### CREDOC

Rue de la Montagne 34/Bergstraat 34 Bte 11/Bus 11 1000 Bruxelles/1000 Brussel

#### DANMARK

Schultz EF-publikationer Mentergade 19 1116 Kebenhaun K Tif: (O1) 14 11 (# Telecopier: (O1) 32 75 11

#### BR DEJTSCHLAND

Ours jesenzeiger Verlag Breite Straßo Postfach 10 80 06 5000 Köln 1 Tr. (02 2 1) 20 29-0 Fernschreiber: ANZE GER BONN 8 882 595 Teleconierer: 20 29 27A

#### GKELCI

株式、Tieftheroudakis SA International Bookstore 4 Nikis Stroet 105 63 Athena Tal. 323 2.1 85 Telex 2194 10 ELEF

Sub-agent for Northern Greece: Wintho's Bookstors

The Business Bookshop 10 Tsimicki Street Thesseloniki Tcl. 275:271 Telex 412885 LIMO

#### ESPAÑA

Boletin Oficial del Estado Trafalgar 27 28010 Medrid Tel. (91) 446 d0 00

Mundi Prensa Libros. S.A.
Castelló 37
28001 Madrid
Tel. (91) 431 53 99 (Libros)
431 32 22 (Suapripciones)
435 36 37 (Dirección)
Tálax 493. O-MPLI-E

#### FRANCE

Journal officiel
Service des publicutions
des Communautés européennes
28, rue Deseix
75727 Puris Cedex 15
Tél. (1) 45 78 61 39

#### IRELAND

Governitient Publications Sales Office Sun Alliance House Molesworth Street Dublin 2 Tel. 71 03 09

or by post

Government Stacknery Office Publications Section

6th floor Bishop Street Dublin 8 751, 78 16 96

#### ITALIA

Lionea Spa
Via Lamerttom, 45
Casella postale 652
60 121 Firenze
Tal. 67 47 51
Telex 670486 Licosa I
CCP 343 609

Subagenti:

Libraria scientifica Lucio do Sie no - AE/OU

Via Maravigli, 16 20 123 Milano Tel. 80 76 79

Libearia Tassi Via A. Farnese, 28 00 192 Roma Tel. 31 05 90

Libreria çiuridica Via 12 Ottobre, 172/R 16 121 Genovo Tul. 59 98 VG

GRAND-DUCHÉ DE LUXEMBOURG et autras pays/and other countries

Office des publications officiales Jes Communautés vuropéennes

2, fue Merciar L-2986 Euxembourg Tél. 49 92 81 Télex PUSOF LU 1324 b CCP 19190-81 CC bancaire 61L 8-109/6000/200

Ahonnements/Subscriptions

Measagaries Paul Kraus
11, rue Christophs Plantin
L-2339 Luxembourg
Tai. 49 98 388
76lex 2516
CCP 49242-63

#### **NEDSRLAND**

Staatsdrukkerij- en uitgeverijbedrijf Christoffel Plantijnstraat Postbus 20014 2500 EA 's-Gravenhage Tel. (070) 78 98 80 (bestellingen)

#### PORTUGAL

Imprensa Nacional Casa la Moede E. P. Rua D. Frandrou filanuel de Melo, 5 1092 Lisbus Godex Tel. 89 34 14 Tolex 15328 INCM

Distribuldora Lit fos Bertrend Lda. Grupo Bertrand, SARL Rua des Terras dos Vales, 4-A Az art. 37 2700 Amadora CODEX Tel. 493 90 50 - 494 87 88 Telex 15750 SERDIS

#### UNITEU KINGUOM

HM Stationery Office HMSO Probleations Centre 51 Nine Sims Lane London SW8 5DR Tel. (01) 211 53 66

#### Suc>agent:

Alan Armatrong & Associates Ltd 72 Park Ruad London N'N? 4SH Tel. (N) 723 39 02 Tolex 297635 AAALTD G

#### UNITED STATES OF AMERIC Y

Europear: Community Information Service 2100 M Street, NW Suite 707 Washington, DC 20007 Tel. (202) 862 3500

#### CANADA

Nenouf Publishing Co., Ltd 61 Sporks Street Octawa Ontario K1P SK1 (el. Toll Fren 1 (800) 267 4164 Ottawa Rogion (613) 238 8985-6 Telex (63-4536

#### JAPAN

Kinokuniya Company Lt., 17-7 Shinjuku 3-Chome Shiniuku ku Tokya 160-91 Tel. (03) 354 0131

Journal Department PO Box F5 Chitose Yokyo 156 Yel. (03) 439 C124





European Centre for the Development of Vocational Training, Bundesallee 22, F:-1000 Berlin 15, Tel.: (030) 88 41 20; Telefax: (030) 88 41 22 22; Telex: 184 163 eucen d

Price (exc!uding VAT) in Luxembourg ECU 4 BFR 180 IRL 2.90 UKL 2 7 USD 4



OFFICE FOR OFFICIAL PUBLICATIONS
OF THE EUROPEAN COMMUNITIES
L-2985 Luxe...bourg

8-2824-258-5P N8ZI

